

MIND

A QUARTERLY REVIEW

OF

PSYCHOLOGY AND PHILOSOPHY

I.—CHRISTIAN THEOLOGY AND MODERN
SCIENCE OF NATURE (II.).

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II.

Differences between Modern and Ancient Rationalism.

What I shall term 'rationalism' in theology is the doctrine that the activity of God is an activity of reason. It implies the corollary that the activity of reason in man, in so far as it is pure, is itself divine. The purity of reason consists in its freedom from admixture with sensuous elements, so that the consequence follows that the human reason has only to liberate itself from the impressions of experience in order to think the thoughts of God. Because God is nothing but reason, there is nothing not pervious to reason, and therefore nothing mysterious or inscrutable in his nature. That God is not completely known is due to the defect of a finite understanding, not yet wholly freed from the illusions of sense, not to the presence in God of anything either itself other than reason, or impenetrable by reason. Aristotle's theology¹ provides the classical example both of this doctrine and of its corollary. According to him the activity of God is exhausted in 'theoria', or contemplation; and the faculty of reason by which man shares the same activity is the divine element in his composite nature.²

¹ See *Eth. Nic.*, Bk. X.² *Ibid.*, 1177a, 15-16, b, 26-34.

Rationalism in philosophy of nature is the doctrine that the essence of nature is intelligible, in the sense in which I defined the term in the previous part of this article.¹ It implies that, however sensuous experience may be necessary as a step preliminary to the discovery of the essence, every sensuous element is discarded from the act in which the essence is known. It is the theory of nature presupposed by the possibility of an *a priori* (deductive or demonstrative) science of nature.

Aristotle is rationalist in his philosophy of nature as well as in his theology, but he fails to provide the link which would make explicable the connection between the two. Why should the same 'askesis' of reason which enables it to rise to the comprehension of the thoughts of God, enable it also to penetrate to the essences of natural objects? On Aristotle's own theory of God's activity, according to which his thoughts are divorced from all reference to the natural world, there is not only no reason why this should be so, but every reason why it should not. The only theory which would relate the two rationalisms of Aristotle to one another would be one which should entail the consequence that God's thoughts *are* the essences of natural objects. It is the importance of the doctrine of the divine Demiurge that this is precisely what it does.

According to this doctrine God not only thinks, but carries out his thoughts by giving them a material embodiment in the world of nature; natural objects, conversely, are nothing but embodiments of the divine ideas. Nothing short of this doctrine could justify two assumptions which Aristotle had acted upon, but for which he could give no ground: the first that a science of nature is possible, the second that it is worth while. Why should the entry of reason among the divine ideas suffice to disclose to it also the essences of natural objects, unless God had made the natural objects to conform to his ideas? More important still, why should a rational being take an interest in the understanding of nature, if nature were not the embodiment of a divine reason akin to the reason which is in himself (or rather which *is* his self)?²

The doctrine that God is a Demiurge, that is to say, practitioner of a *Techne*, is a departure from pure rationalism in theology to this extent, that it attributes to God a practical activity in the execution of the idea, additional to the theoretical activity of conceiving it. But the extent of the departure is minimised by the peculiarities of that particular form of practical activity denoted by the Greek term "*Techne*". Its characteristic is to be an activity in which the will is determined wholly by the reason.

¹ p. 460.

² *Eth. Nic.* X. 1178a, 2.

The reason of the artificer conceives beforehand the idea of what is to be produced, and the scope of his will is confined to the carrying out of that idea. To whatever extent his will is *arbitrary*, that is to say, exceeds the prescription of reason and so issues in a production not completely determined by the idea, to that extent he is a bad artificer, or, what is the same thing, he is to that extent no artificer. He merits that title only in so far as he makes his material into something which it was not before, say clay into a jug, and he does this only in so far as he imparts to it the idea conceived by his reason. So far as his fingers are not guided by the idea, but are moved by arbitrary will, they must fail to make the piece of clay into something else; they alter its shape, but leave it still a piece of clay.

Thus the doctrine of the divine Demiurge may still be called 'rationalist' in the limited sense that it allows to God no activity of will not controlled by reason; and (since we shall have little occasion to refer in future to any theology which is 'rationalist' in the Aristotelian sense, that it denies to God any activity except that of pure theory) I shall apply the term 'rationalism' to it henceforth in contrast to any doctrine which attributes to God an activity of arbitrary will.

A theology which is rationalist in that strictest sense of the term has no direct connection with a philosophy of nature, since its whole purport is to deny to God's activity any effect upon nature; but a theology which is rationalist in the sense in which I shall now use the term necessarily implies a rationalist philosophy of nature, which implies in its turn the possibility of an *a priori* natural science. It will be worth while to dwell a little longer on the reciprocal implication of a rationalist theology and a rationalist philosophy of nature; and it may serve to set it in a clearer, or at least another, light, if we replace the terminology of form and matter by that of end and means.

The end proposed to himself by the artificer is not sensible at all, but is an intelligible universal idea, to conceive which is the work of his reason. But the end can be realised only by means of alterations in the sensible qualities of the material, and these alterations can be effected only by an activity of will supervening upon the theoretical conception. Thus, in artificial production reason conceives the end and will effects the means, and the subjection of will to reason in such an activity is apparent in this, that it can effect nothing, induce no sensible alteration, except in so far as this is demanded as a means to the realisation of the end. If, and in so far as, the will does thus exceed the prescription of reason, the maker is no artificer and his product no artefact.

The nature of an artefact depends upon its being the product of such a process. Its nature is the end realised in it, and this is not sensible but intelligible. What is sensible in the artefact is the means by which the end has been realised, but the end is not to be identified either with any of the means or with the sum total of all of them, and the thing itself or the essence of the thing is related to its sensible characteristics not as whole to parts, but as end to means.

For this reason experience, although it plays a part, plays a different part in a science of artefacts (if there were such a science) from that which it plays in the empirical science with which we are familiar in the modern world. Experience acquaints us with the means, and acquaintance with the means is an indispensable preliminary to the discovery of the end ; but the end is something quite other than the sum of all the means, and the knowledge of it may still be wholly lacking when empirical observation has exhausted every sensible quality of the object. Thus, if I am presented with an artefact of a kind unknown to me, I may observe and record every quality of it of which experience can inform me, but still be as far as ever from discovering the end which it was made to realise ; that is to say, its nature, or what it is. This discovery is made only when there supervenes upon experience a cognitive activity different from it in kind—when, namely, the reason in the soul of the observer leaps to a recognition of the reason which guided the activity of the producer and which his work embodied in the product ; and this recognition, although it is not possible without some experience, may come equally at an earlier or at a later stage in the enumeration of observed characteristics, and when it has come, it renders the continuance of the enumeration superfluous. In such a science, therefore, experience has no place as a cognitive activity by which nature is known, but only as a stage which must have been transcended and replaced by the non-sensuous activity of reason, which alone is science.

Thus a theological rationalism which wholly subordinates God's will to his reason, implies a philosophy of nature according to which the essence or nature of natural objects is intelligible ; and this in its turn implies a science of nature, which is not empirical, but in which experience plays precisely the part which it must play according to the assumptions of the Aristotelian logic.

A departure from rationalism in theology by the ascription to God of an arbitrary faculty of will must involve a reformation of this philosophy of nature, and in consequence a revolution in the methods of natural science. Suppose that God's will is not

so subordinate to his reason that it is confined to the effecting of means to an end prescribed by the latter, it will be to that extent like the will of the bad artificer. It will issue in the production of "means", which are yet means to no end. Therefore neither will God's productive activity be intelligible by reference to its purpose (since *ex hypothesi* it is determined by none), nor will empirical observation of the sensible qualities of his product enable the reason of the observer to penetrate beyond them to grasp the end which is realised in it (since *ex hypothesi* no end is realised in it). The product of an arbitrary will is contingent, and of the contingent there can be no knowledge beyond experience.

The exercise of arbitrary will by an artificer is a defect of his nature, and the presence of the contingent in his products is a defect of theirs; and experience of the contingent does not acquire scientific value merely because, of the contingent, there can be no knowledge but experience. If God were still an artificer, but a bad one, and natural objects, therefore, still artefacts but imperfect ones, the consequence would be, not that science of nature must be empirical, but that of nature, to the extent of God's incompetence and its contingency, there can be experience and not science.

If, on the other hand, there can be no defect in the divine nature, then the ascription of arbitrary will to God implies not that he is a bad Demiurge, but that it is his nature to be something other than a Demiurge. It will follow that contingency in the objects which are his products is not a defect of their natures, as though they were artefacts but bad ones, but that it belongs to their nature to be contingent. But if this is so, then the experience to which alone the contingent is accessible, will be itself a knowledge of their nature, and natural science can no longer begin with the transcendence of experience, but must be itself empirical.

If the logical connection is not already evident between a voluntarist¹ theology and an empirical science of nature, I do not suppose that anything which I could add will make it so. I have introduced it here as the clearest illustration of the principle upon which I depend throughout, namely of the strict reciprocal implication between theology, philosophy of nature and scientific method, in spite of the fact that it falls strictly outside the scope of the present article. I am not here concerned to trace the displacement of a rationalist by a voluntarist theology

¹ I shall use this term as the contradictory of "rationalist" in the sense in which I am employing "rationalist" now and henceforth. Thus a theology is constituted voluntarist not by the mere fact that it attributes to God a faculty of will in addition to reason, for the doctrine of the divine Demiurge does this; but by the fact that it attributes to God an activity of will not wholly determined by reason.

and the consequent substitution of empirical for *a priori* methods in natural science. I shall endeavour to exhibit instead the modifications necessitated by Christian dogma within the framework of rationalist theology, and to show how these are reflected in the philosophy of nature peculiar to modern rationalism (in that of Descartes, *e.g.*). As there is a modern rationalist philosophy of nature, so there is also (though this fact is often ignored) a modern *a priori* natural science, and my primary object here is to exhibit and explain the peculiarities (not by which empirical is distinguished from *a priori* natural science, but) by which the modern *a priori* natural science is distinguished from its ancient counterpart.

The doctrine that God is a Demiurge is inconsistent with the divine omnipotence in two respects, since it implies that God's activity is conditioned both by a given matter and by a proposed end, neither of which derives its being but only its coalition with the other, from this activity. The first task of Christian theology, therefore, must have been such a reformation of the conception of God's activity as would set it free from both limitations. I shall consider first the limitation of the Demiurge's activity by a given matter, and the consequences of its removal.

From the fact that the Demiurge has to realise his idea in a material alien to it, the consequence follows that his idea is never perfectly realised. This necessary imperfection of the realisation of an idea may best be illustrated in the example of the drawing of a geometrical figure. Particular sensible triangles are, on the one hand, material embodiments of the universal idea which the geometer comprehends in his definition of triangle; indeed, it is only in so far as they do embody it that they are what they are, namely particular triangles, at all. On the other hand, and notwithstanding this truth, the particular triangle, precisely in so far as it is material and therefore in so far as it is particular, must fail to realise perfectly the idea which it is yet its essence to realise in some sort. The lines, *e.g.* of which any material figure is composed, however finely they are drawn, must be still visible and must, therefore, fail to conform to the definition of a line. But since only the definable line is the proper object of the scientist's (in this case the geometrician's) study, it will follow that the object, in so far as it is material, is not a proper object of scientific understanding. Material figures are of use in so far as they serve to suggest the immaterial figures which they imperfectly represent; but the latter and not the former are the objects of scientific understanding.

All embodiments of an idea in an alien material must suffer from this defectiveness. Hence, if the natural world is the product of a divine Demiurge working on an alien material, it will follow that the ideas which inform his operation are never perfectly realised in the material world at all. But since these ideas are the proper objects of scientific understanding, it must follow that natural objects, in so far as they are material, are not proper objects of science. They can perform for the natural scientist only the same function which sensible figures perform for the geometrician; that, namely, of suggesting to his mind each the archetype which it imperfectly represents, but which has a perfect realisation nowhere except in the intelligence of God.

The productive activity of a Christian God could not be held to be thus limited by the recalcitrance of an alien material. But if it is not, then the consequence follows that the ideas which are objects of God's reason are exactly carried out, not imperfectly represented, in the material world. But if this is so, then the material world is, *quâ* material, the proper object of exact science.

It hardly requires to be said that the philosophy of nature implied in this reformed theology is precisely the Cartesian philosophy of nature, and that it supplied the presuppositions of the modern sciences of Mathematical Physics and of Mechanics.¹

¹ It may serve to illustrate this distinction if I add that, if God is freed from this limitation of a Demiurge, his ideas will be present in the material world in the manner in which, according to Kant, the categories are present in the objects of experience; but that if he is a Demiurge, his ideas will be related to the material world in a manner more like that in which Kant's Ideas of Pure Reason are related to the phenomenal world.

Bacon (*Novum Organum*, II., 17), is at pains to distinguish the "forms", which he declares to be the proper object of science, from the "forms" of previous philosophers; he will not be understood, he says, to be speaking of forms "aut in materia non determinatis aut male determinatis". Natural science, in other words, must assume that the forms are in nature in the manner in which they would be present there if nature were the work of an omnipotent Creator, not in the way in which they would be present there if they had had to be wrought by a Demiurge into a recalcitrant material.

Another passage of Bacon is worth quoting in this connection, "Manifestum est, Platonem, virum sublimis ingenii . . . in sua de Ideis doctrina *Formas esse verum scientiæ objectum* vidisse; utunque sententiæ hujus verissimæ fructum amiserit, *Formas penitus a materia abstractas, non in materia determinatas, contemplando et prensando*; unde factum est, ut ad speculationes theologicas diverteret, quod omnem naturalem suam philosophiam infecit et polluit" (*De Augm.* III., 4; quoted by Fowler in note to *Novum Organum*, loc. cit.). If the "forms" are wholly determinate (that is, perfectly realised) within nature (as they can only be if matter presents no obstacle to their realisation), science will find its proper object within the material world; if not, it will find only 'copies' or 'imitations' in material nature, and must seek its proper objects elsewhere.

The omnipotence of God is equally incompatible with the other limitation to which the activity of a Demiurge is subject. Christian theology could not tolerate the doctrine that God's will is directed, as the will of an artificer must be, by the conception of a form or end whose being is independent of himself. It was set the task therefore of preserving the rationalist principle that God's reason governs his will (since if this were surrendered, the conclusion might well have seemed unavoidable that neither theology nor science of nature was possible), but of preserving it without sacrificing the divine omnipotence. The former principle demands the limitation of God's will by subordination to his reason, and therefore to whatever ideas are objects of his reason ; but this limitation of God's will can be rendered compatible with his omnipotence if it can be held that these objects are not proposed to his reason from without, but are themselves products of the activity by which he conceives them. The activity by which they are produced cannot itself be an activity of will, since this would entail the liberation of God's will from all limits, and consequently the surrender of the rationalist principle. There must therefore be ascribed to God an involuntary activity of producing the ideas upon which his reason may terminate and by which the subsequent act of creating the world may be determined.

I think it will not be time wasted if I consider first a solution of this problem which played an important part in the development of Christian theology, but the implications of which were to prove inconsistent alike with Christian orthodoxy and with the presuppositions of modern natural science.¹ This is the doctrine of the Divine Word by which St. Augustine endeavoured to reconcile Platonism and Christianity.² According to this doctrine the Divine Word is identified with the Second Person of the Trinity, and the act of generating the latter with that of uttering the former. This utterance is not to be understood on the analogy of an utterance in speech or language, but as the speechless production of

¹ The following pages, in which I attempt to enter more in detail into Christian theological doctrines, are an excursion into a field in which, though I could hardly avoid entering it, I am disqualified by ignorance, and much of what I say is only guessing. I apologise to any theologian who may read these pages for the crudities which he will certainly, and the errors which he will probably, discover in them. In regard to the latter, I do not wish to deprecate his censure, but I would ask him in each case to consider whether the correction of what I may have erroneously stated is or is not fatal to the conclusion which I have endeavoured to sustain.

² See *De Trinitate*, XV. § xvii. ff. I owe the reference to Webb, *Studies in the History of Natural Theology*, p. 169.

a thought which may afterwards be expressed in words.¹ It is thus an activity of understanding terminating on an intelligible object not presented to it from without, but itself the product of the activity by which it is understood, and God is freed from the limitations of a Demiurge by being able to be the author of his own thoughts. On the other hand, the rationalist principle is preserved intact by the distinction drawn between the generation of the Word and the creation of the world. God's will is engaged only in the latter activity, and its operation is determined wholly by the ideas produced in the former. Creation is nothing but the material embodiment of those ideas.²

However important the advance made by this doctrine over any theology which had preceded it, it fell short of adequacy to the Christian faith by its inability to distinguish the Creation from the Incarnation.³ It must define the Creation as the material embodiment of the Word, and it can define the Incarnation in no other way. Its inability to distinguish the Creation from the Incarnation is a sign of its failure to render the full significance of the revealed doctrine of Creation.

Nor is the philosophy of nature implied by this theology consistent with the presuppositions of modern natural science. If nature is the incarnation of the divine Word, one of two alternatives must be admitted. Either the Word suffers diminution by material embodiment, so that nature is an imperfect representation of that which exists perfectly only in the eternal reason of God; or it does not. If the former alternative is adopted, the consequence must follow that material nature is not the proper object of science, but that investigation of it is useful only as the inspection of sensible figures is useful to the geometrician; that is to say as a means of conveying the mind beyond nature to the contemplation of the Word as it exists in the divine reason. The latter alternative entails the consequence that nature is divine; that is to say, it annuls that distinction between the divine and the natural which we have already found to be both the principle by which Christianity is differentiated from paganism and an essential presupposition of the possibility of applying scientific methods to nature.

The permanent contribution of this doctrine of the divine Word to the development of modern philosophy lay in its conception of what, borrowing a phrase from Kant, I will call 'intuitive understanding', that is to say, in the conception of a

¹ "Dicimus locutiones cordis esse cogitationes," *ibid.*, § 18. "Verbum quod foris sonat signum est verbi quod intus lucet," § 20.

² *Ibid.*, § 22.

³ Cf. Webb, *op. cit.*, p. 241.

theoretical activity which produces its own object. Nothing short of this conception could reconcile the rationalist principle, that the divine will is subject to reason, with the omnipotence of God.

A rationalist theology involves both a rationalist philosophy of nature and a rationalist theory of knowledge of nature. If God made the world according to reason, the world must embody the ideas of his reason ; and our reason, in disclosing to us God's ideas, will at the same time reveal to us the essential nature of the created world. But since our reason can do this only in so far as it retraces the course of God's reason, it follows that a modification of the conception of God's reason (the reason which governed the making of nature) implies a correlative modification of the conception of our reason (the reason which constitutes the science of nature). If God's reason is freed from the limitations of a Demiurge, so that it is not directed upon independent objects, but itself produces its own objects, our reason also must be freed likewise. Its proper activity must be held to be not contemplation, in which the mind is turned outwards upon an eternally subsistent intelligible world, but meditation, in which it develops a system of intelligible ideas from within itself.

This implication is worked out in the Cartesian theory of knowledge. For Descartes the ideas of reason are "innate", not in the sense that they are present ready made in the mind from the beginning (if they were, every man would be omniscient at birth without any necessity of reasoning), but in the sense that the reason develops them by cultivation of itself, and does not have them presented to it from without ; in other words, that thought produces its objects in the activity by which it understands them.

If we define intuitive understanding as an understanding which produces its own objects, it is clear that such an understanding is attributed to God by the theology which identifies the reason by which the act of creating the world is controlled, with the Second Person of the Trinity. This doctrine we found to be incompatible both with Christian orthodoxy and with the pre-suppositions of modern natural science.

On the other hand, we have just found that the Cartesian theory of knowledge attributes to the reason of the scientist an activity which must be called intuitive understanding upon this definition of the term ; and if, as the Cartesian philosophy of nature asserts further, the activity of the scientist's understanding yields an *a priori* knowledge of the natural world, this can only be because

the creation of the natural was governed by an act of understanding in God which was similarly intuitive. In other words, the Cartesian theory of knowledge and the Cartesian philosophy of nature presuppose a theology which attributes to God an activity of intuitive understanding in the sense in which I have defined the term.

We are thus presented with a problem which is crucial both in its difficulty and in its importance; for the Cartesian theory of knowledge and philosophy of nature deliver, as I shall have later to maintain, the very presuppositions upon which at least some modern sciences of nature were based. If, therefore, it should appear that this theory of knowledge and philosophy of nature is compatible with a theology which has been found to be unorthodox, and therefore unchristian, the whole contention that there is a necessary implication between Christian theology and modern natural science would be imperilled. Besides, it has been shown that this unorthodox theology gives rise to a conception of nature which is incompatible with the methods of modern natural science. To be forced to admit that the same theology gives rise to two different and mutually incompatible conceptions of nature would be tantamount to the admission that it does not necessitate either one of them, and thus the entire conception of a reciprocal implication between theology and philosophy of nature would be called in question.

There can be only one solution of this difficulty, and it must lie in the distinction of two senses within the term 'intuitive understanding'. I do not mean that the definition of it which I have hitherto employed must be shown to be ambiguous, but that it must be shown that this definition is capable of including two kinds of activity, alike in conforming to it but differing from one another in some further respect. It will then be possible to distinguish a sense in which it is orthodox to say that God's creation of the world was governed by an act of intuitive understanding, from the unorthodox theological doctrine which may be designated by the same words. If it can then be shown that of these two the orthodox, but not the unorthodox, is presupposed by the Cartesian theory of knowledge and philosophy of nature, the difficulty will have been surmounted and the supposed objection answered.

Although it is necessary for a rationalist Christian theology to assert that God himself produces the ideas which govern his will in the creation of the world, it is not necessary that their production should be identified with the generation of the Son. It is possible instead to have recourse to the Old Testament

doctrine of the Law, and to conceive the production of the divine ideas not as the eternal act by which God generates the Son, but as the eternal act by which he establishes the law, to which then his will is subject in the creation of the world.

I must confess that I lack the knowledge of the history of theology which would enable me to exhibit this transition taking place ; but that it was demanded by Christian orthodoxy is, I think, sufficiently indicated by the fact that the latter conception does, as the former does not, permit a distinction to be drawn between the creation of the world and the incarnation of the Son.

If we turn now to consider the effect of this modification of theological doctrine upon the theory of knowledge and the philosophy of nature, its implication is clear. The Son has a substantial, but law no more than a modal being. The divine law can have no being except either as a concept of God's understanding or as a mode of the material substance which is created in conformity with it. But the divine Son must be conceived to have a substantial being relatively both to the Father by whom he is begotten, and to the created world in which (or, if the unorthodox implications of the doctrine are pressed, *as which*) he appears. He is not dependent on the former in the sense in which an idea is dependent upon the mind which conceives it, nor upon the latter in the sense in which, say, a law of motion is dependent for its being upon the existence of the moving bodies which exhibit it.

Since it must be held by a rationalist epistemology that the reason of the scientist retraces the course of God's understanding, it will make a great difference to the theory of knowledge whether God's reason is held to terminate upon a substance (as in the former theological doctrine) or (as in the latter) upon a concept. In the former case it must be held that we can arrive by the exercise of pure reason at a knowledge of an intelligible substance related to the world of nature as reality to appearance ; in the latter case it must be held that we arrive by the exercise of pure reason at a knowledge of universal and necessary laws, exhibited throughout nature, but incapable of a substantial being apart from it. The latter, in other words, implies the possibility of an *a priori* science of nature, the former of an *a priori* metaphysics.

What is involved in the distinction between these two theories of knowledge may perhaps be thrown into a clearer light if we observe, that the activity of reason implied by the orthodox theology of the Law corresponds to the activity of a *a priori* cognition attributed by Kant to the understanding, and that the other, implied by the theology of the Son, corresponds to the

activity of *a priori* cognition claimed, according to Kant, by the 'reason', but denied to it by him. Both of these cognitive activities conform to the definition which I have employed of "intuitive understanding", since the understanding itself, upon Kant's own doctrine of it, produces its concepts in the act of cognition. The difference between the *a priori* cognition of the understanding and the *a priori* (pretended) cognition of the reason is that the former is cognition only of a concept, which can therefore have objective existence only in so far as it is realised in the material world, while the latter must be, if it is anything, cognition of a substance related to the material world as reality to appearance. Kant himself defines the term 'intuitive understanding' in a sense which confines its denotation to the latter of these two activities. Hence his denial of the possibility of intuitive understanding is in reality a denial of the possibility of that form of intuitive understanding which has been shown to be implied by an unorthodox theology. Kant is a valuable witness to the connection of implication between modern natural science and orthodox Christian faith for the following reason: he sets out to inquire what kinds of knowledge are possible and what are not. He does not apply the criterion of orthodoxy, but that of natural science; in other words, he does not ask: What cognitive activity are we compelled to attribute to man by the necessity of conforming with orthodox Christian theology? but: What cognitive activity is presupposed in man by the existence of the sciences (sc. of mathematics and mathematical physics)? But the cognitive activity which he eliminates by the latter criterion is the same as that which would have been eliminated by the application of the former.

It is important to bear in mind that what I have designated the orthodox¹ Christian theological doctrine is still rationalist. The law which God imposes upon the created world is not itself a product of God's will. It is not a command. It is the product of his understanding and his will is wholly subject to it.

According to the implication which we have noted between rationalism in theology and rationalism in philosophy of nature, it must follow that an *a priori* science is possible of a nature so created, on the same grounds which would make it possible if nature were the work of a Demiurge. The scientist is enabled

¹ I use this designation for the sake of convenience in contrasting this theological doctrine with the other. It is, I suppose, orthodox in comparison with that. But I do not wish to imply that it itself is completely orthodox.

by the use of his reason alone to enter into the reason of God, or, in Kepler's phrase, to "think God's thoughts after him"; and because God has made nature to conform to his thoughts, what the scientist discovers by this process will be in fact the laws of nature.

But although a science of nature so pursued is no less *a priori* than Greek science, it differs from the latter in a manner precisely corresponding to that in which the Christian theological rationalism differs from the Greek. It is directed in the first place upon the laws, and not upon the ends, of events in nature. The first laws of nature to be enunciated as such were Kepler's three laws of planetary motion.¹ But in the second place it expects to find, and finds, these laws realised perfectly and without exception in the world of material nature itself; they are statements of the ways in which natural objects not *ought to*, but *must* act. Therefore the modern scientist found within material nature the intelligible law which was the proper object of his science; whereas his Greek or mediæval predecessor could find in matter no more than an approximation to the intelligible idea, of which alone scientific knowledge was possible, and in order to know which therefore he had to turn his intellect away from material nature to a realm of intelligible objects² suggested by it, but never perfectly realised in it.

Hence are derived two assumptions which will easily be recognised to be fundamental presuppositions of modern scientific method: the first the assumption that the scientist has to look nowhere beyond the world of material nature itself in order to find the proper objects of his science, the second (which is really a corollary of the first) that the intelligible laws which he discovers there admit of no exception.

Both are consequences of the doctrine that the material world is the work, not of a Demiurge, but of an omnipotent Creator. It is because a Demiurge has to work in an alien material that he never wholly realises in it the idea which his reason conceives, so that the observer of the product, the object of whose search is to discover the idea of the producer, can never discover in the material product the object of his search, but only such an approximation as may enable him to conceive it as it is in that intelligible

¹ E. Cassirer, *Das Erkenntnisproblem*, 3rd edn., Vol. I., pp. 374-5.

² This does not, of course, imply that he was thereby necessarily committed to a 'realist' view of universals, in the sense that he had to attribute to them a real *existence* apart from matter. Whether existent or not, they were intelligible only when distinguished from their material embodiment, and were *unfitted* to be objects of science to the precise degree in which they were involved in matter.

perfection in which it is present to the mind of the producer, but in none of his products. But a divine Creator who is not limited by a recalcitrant material, can embody his ideas in nature with the same perfection in which they are present to his intellect, so that the scientist can find in nature itself the intelligible objects of which he is in search, and not merely imperfect ectypes of them. Similarly, the laws of an omnipotent lawgiver cannot be related to the objects of his creation as ideals to which they more or less conform, but as rules to which their submission is absolute, both extensively, in the sense that there can be no exceptions to them, and intensively, in the sense that there can be in no given case a degree of submission which is less than perfect.

I am at a loss how to proceed further in the establishment of my present point, because I cannot see upon what ground it will be possible to question the truth of either of the two following propositions: the first, that the conception of nature as subject to intelligible laws which are fulfilled both perfectly in each case and without exception in any, is an indispensable presupposition of the mechanical science of nature which is peculiar to the modern world; the second, that this conception of nature is implied in the doctrine that God is an omnipotent lawgiver, subject to no impediment whatever in the realisation in created nature of the laws which his reason conceives.¹

¹ I will add here a distinction which I have not wholly ignored in the text, but which would have obscured the main direction of the argument, if I had elaborated it there. The distinction between modern and ancient theological rationalism which I have been principally concerned to insist upon, is that a Demiurge cannot, whereas an omnipotent Creator cannot but, give a perfect realisation in his work to the ideas of his intellect; from which it follows that the product of the latter possesses the intelligibility which belongs in the case of the former not to the product but to its ideal archetype. But Christian did not differ from Greek theology only in attributing to God a superior power of realising the objects of his intellect; it attributed different objects to his intellect. The ideas in the intellect of a Demiurge must have been, or at least have included, those specific universals (man, dog, sponge) which, when they are embodied, constitute at once the essence and the kind of the particular substance which is informed by them. But such specific essences were not included among the 'intelligibilia' assigned by Christian Rationalism to the understanding of God. In the place of universal and intelligible essences were substituted universal and intelligible laws.

I think it might be shown, although I am by no means prepared with the proof, that this substitution is itself implied in the transition from the concept of Demiurge to that of Creator. But there is an intermediate stage in this transition which I cannot ignore although I have not the necessary knowledge to explain it, in which the 'intelligibilia' are identified neither with forms (specific essences) nor with laws, but with the mathematical concepts of number and figure. (Continued at foot of next page.)

It is necessary at this point to insist that none of the modifications which we have so far found to be introduced by Christianity into Greek theology have been such as to constitute it less rationalist. So long as the law by which God's activity of will is governed is held to be conceived by his reason, but not to be itself the product of his will, then his will is subjected to his reason no less entirely than the will of the Demiurge himself. A will thus subjected imports no contingent element into the nature which is its product, and necessitates therefore no empirical element in the science of nature.

The objection will no doubt be felt that, since no modern science of nature lacks an empirical element, no derivation of it can be adequate which omits to explain the presence of this element. There is a sense in which this objection is both just and important, and I shall proceed immediately to supply the omission. On the other hand, the objection might be intended in such a sense that the only proper answer to it would be to show that it is based upon a misapprehension of the character of modern natural science, and it is worth while devoting a short space first to the exposure of this error.

The misapprehension which I have in mind is one which appears

The importance of this stage in effecting the transition from Greek to modern Rationalism will be readily admitted; that the objects of mathematics are intelligible *par excellence* is a principle common to both, while they differ in holding, the former that this mathematical intelligibility is shared by the specific essences of natural objects, the latter that it is shared by the laws of their movement. But the importance of this stage is not merely that it effected the transition to modern Rationalism; it was retained also as an essential part of modern Rationalism. The modern *a priori* science of nature presupposed that the divine reason was directed no less upon mathematical concepts than upon universal laws, the science of mathematical physics in particular depending upon the former presupposition and the sciences of mechanics and kinetics upon the latter.

But, it may be objected, if there is this point of identity between the Greek and the modern theological presuppositions, why is there not a corresponding identity in the sciences depending upon them? The answer to this, I think, must be twofold. It is true, in the first place, that mathematics is the common element in modern and in Greek science. But in the second place, the differences by which modern is distinguished from Greek mathematical science seem to be precisely such as must have flowed from this difference in their theological presuppositions, namely that while in either case the reason of God is directed upon identical objects, a God who is a Demiurge can only copy them defectively in the material world, while an omnipotent Creator can realise them perfectly in it. Hence there follows the crucial difference that mathematics is for modern science an instrument for the understanding of material nature, but for Greek science a step in the progress of the mind away from matter to the immaterial objects of which alone scientific understanding is possible.

to me especially prevalent in schools of thought which draw their inspiration from the English Empiricist tradition. Thus it is assumed, in accordance with the Lockian doctrine, that *a priori* knowledge (of which the science of mathematics is the principal example) can extend no further than to relations between our ideas, whereas knowledge of real existence is wholly empirical. Since natural science is distinguished (from the mathematical sciences, *e.g.*) by having real existents as its object, it will follow that natural science must be void of any *a priori* element. It will lack, therefore, both necessity in its reasonings and strict universality in its conclusions, and will proceed to probable generalisations from observed similar instances. The epistemological problem will then be set, not in the form : How is *a priori* knowledge of nature possible ? because that possibility is not granted, but in the form : How is it possible, in the absence of *a priori* knowledge of nature, nevertheless to draw general conclusions from particular data ? Set in these terms, it is identical with the problem familiar to the readers of modern Logics as the "problem of induction".

The misapprehension against which I protest is not that of supposing that this method of empirical generalisation is employed at least in some modern natural sciences, it is that of assuming that no modern natural science employs any other. It is not false that the "problem of induction" is a legitimate and important epistemological problem, but it is wrong to suppose that it is the only epistemological problem to which modern science gives rise.¹

The misapprehension is made easy by the truth that no modern science of nature is devoid of an empirical element, so that there is a sense in which it is true to say that all modern natural science is empirical. It seems only an immediate inference to conclude from this admission that no modern natural science is *a priori*, and hence that all are restricted equally to the method of empirical generalisation. But the inference is fallacious, because "empirical science" is an ambiguous term. A science may be termed empirical in one sense, if it contains empirical elements, in another sense if it is devoid of any but empirical elements. It is true that all modern natural sciences are empirical in the former sense ; it may be granted that some are empirical in the latter sense ; the false conclusion is that all are empirical in the latter sense.

¹ Those who suppose this must presumably conclude that the problem with which the epistemologies both of Descartes and of Kant are mainly concerned, namely : How is *a priori* science of nature possible ? takes its rise from a mere delusion.

I shall avoid this ambiguity by confining the term "empirical science" to those sciences which are empirical in the latter sense. Those which are empirical only in the former sense, as the sciences of mechanics and mathematical physics are, I shall designate by contrast, and in spite of the empirical element which they contain, the modern *a priori* sciences of nature. To elicit the philosophy of nature presupposed by the method of the sciences which are empirical in the sense just defined, and the theology implied in its turn by that philosophy of nature, is a task outside the scope of this article. The philosophy of nature which I have been discussing, and of which I have tried to exhibit the dependence upon a certain form of Christian theology, is that presupposed by the methods of the modern *a priori* sciences. I propose in conclusion to attempt the task of showing how these sciences combined an empirical element with their *a priori* character, and of indicating the development of theological doctrine presupposed in the admission of this element.

According to the implications, which we began this chapter by remarking, between arbitrary will in God, contingency in nature and empirical methods in natural science, we may expect to find a clue to this problem by inquiring first how far and for what reason a Christian rationalist theology was bound to admit an element of voluntarism into itself.

It is bound to admit it in the two following regards :—

(i) Although what God produces be held to be completely determined by the ideas of his understanding, the like necessity cannot extend to the decision whether he is to produce anything. In this sense his will must be arbitrary, in the sense of being free from determination by his reason.

No argument is required to show that this attribution of arbitrary will to God is a consequence of Christian doctrine ; it is so obviously implied in the doctrine of Creation that God need not have made the world. But it is worth while pointing out that the conclusion thus supplied by revelation is one which a consistent rationalism itself demands. The operation of a Demiurge must be held to be free in precisely the same sense, so soon as the act of manufacture is clearly distinguished from that of generation. The productive activity of the artificer differs from that of the lover, in that the former is guided by an object of reason, the latter by an object of desire. The parent does not need to know the form of the offspring which he is to produce in order to produce it, or, if in one sense he may be said to "know" it, in so far as his love is directed upon this form as embodied in the beloved object, such "knowledge" is something

different from rational apprehension. But in becoming object of the pure intelligence, the idea of the artificial product loses the power, which the object of desire possesses, of moving to the act of production. The conception of the nature and functions of a given machine, for example, will determine the whole activity of the artificer once he has resolved to produce one, but can exercise no influence whatever in determining him to take that resolve. In all artificial production, therefore, (as distinct from natural generation) the resolve to produce must remain undetermined by the rational conception of the form of the product.

Thus, the cardinal principle of theological rationalism, that God produces the world rationally, and not by generation, involves the conclusion that the will to produce it must be arbitrary in the sense of being undetermined by his reason.

It follows from this voluntarism in theology that the existence of nature as a whole is contingent; but not that there is contingency in any natural existent or event, if the existence of nature be granted. This philosophy of nature does not involve the introduction of an empirical element into the methods of natural science itself, but it entails the consequence that the truth of all the demonstrations of science depends upon a condition which cannot itself be demonstrated.

This is the Cartesian philosophy of nature and of natural science. The existence of a material world cannot itself be demonstrated; belief in it must be founded either, as by Descartes himself,¹ upon the evidence of sense-perception, or, as by Regius and Malebranche, upon faith in Revelation. But once its existence is granted, no further element of contingency is held to belong to the nature of particular material things,² and consequently the science of them can rely upon the method of demonstration alone.³

(ii) A rationalist theology is logically bound to admit a further voluntarist element. The objects of God's reason, in so much as they are intelligible, must be universal, and no universal contains in itself a ground of the necessity of its own existence. It is not true merely that God need not resolve to materialise his ideas at all. Suppose him to have taken that resolve, his ideas will still not be sufficient to determine the nature of the created

¹ *Meditation VI.*

² *Principles*, II., viii. "That quantity and number differ only in thought (ratione) from that which has quantity and is numbered."

³ *Ibid.*, lxiv. "That I do not accept or desire any other principle in Physics than in Geometry or abstract Mathematics, because all the phenomena of nature may be explained by their means, and sure demonstration can be given by them."

world without a further exercise of arbitrary choice. Not everything which can be conceived without contradiction is capable of being realised together in one and the same actual world ; or, in the terminology of Leibniz, not everything possible is for that reason compossible. God must therefore select from among his ideas those upon which he is to confer existence, and his act of selection cannot be necessitated by his reason, because there is nothing in any idea which would constitute it more suitable for existence than any other. God must therefore exercise an arbitrary will, in determining not merely whether to create, but which of his ideas to embody. This further element of voluntarism, over and above that which Descartes had recognised, is admitted into Leibniz's theology by his distinction of God's understanding from his will, and of the Possible from the Actual.¹

The implication of this admission for the methods of natural science is obvious. The scientist will be able to discover *a priori* whatever was object of God's understanding and will be able to delimit the sphere of the possible without any appeal to the evidence of experience. But he will depend upon the evidence of experience not merely to assure him that anything is actual at all, but in order to determine which of the alternatives known *a priori* to be possible, is actual in nature. He will rely upon empirical evidence, that is to say, not merely to establish the pre-suppositions upon which the validity of his procedure depends, but as part of the procedure by which his scientific conclusions are themselves established.

A reference to the practice of two modern scientists, Kepler and Galileo, will show that they did in fact achieve their results by a combination of *a priori* with empirical method² precisely such as we have deduced from theological considerations.

¹ God's understanding is directed, according to Leibniz, upon the "aeternae veritates", and these delimit the sphere of the possible ; the conferment of actuality upon some of these ideas is an act of his will which is consequently not determined by his understanding. I do not, of course, wish to maintain that there is nothing in Leibniz inconsistent with this doctrine. The rationalist tendency is too strong in him to allow him to acquiesce permanently in the conclusion that the selection of the ideas for conferment of actuality is an act of arbitrary choice. Thus he adds that this selection is itself determined by the idea of the good, which is, no less than the "aeternae veritates" themselves, an idea of God's reason. I do not wish to embark upon an examination of this doctrine, and it is sufficient for my purpose to point out that it is not really supplementary, but contradictory, to the distinction drawn between the possible and the actual. If the good is an idea of God's reason, God's selection among his ideas is necessitated by his reason, and nothing is possible except what is actual.

² I beg the reader once more to bear in mind that I do not assert this to have been the method of *all* modern natural sciences.

When Kepler set out to discover the courses of the planets, he delimited the possible alternatives by *a priori* reasoning. He assumed in advance of experience that their orbits must conform to a figure mathematically definable. But since a variety of figures so definable were possible, he had recourse to empirical observation in order to determine which was actual. Experience was thus employed to supplement demonstration, but it did not supplant it in the subsequent process of the science. Having determined by observation which of the possible mathematical figures was described by the motion of the planets, the scientist then recurred to the mathematical definition and demonstrated by *a priori* reasoning upon it the further properties which this motion must exhibit. If he had recourse ever and anon to an empirical verification of his conclusions this was to confirm the correctness, not of his demonstration, but of his original observation that this mathematical figure, and not another, is the actual one.

Galileo affords a further illustration of the same principle. Experiment has a place in his science, but it would be wrong to infer that therefore demonstration has none, or to imagine that empirical evidence is substituted in it for *a priori* reasoning. On the contrary the claim is made for Galileo in the preface appended to the original edition of his *Dialogues Concerning Two New Sciences*,¹ that he is seen in that work "to have discovered two entirely new sciences and to have demonstrated them in a rigid, that is geometric, manner". These words were not written by Galileo himself, but by his publisher; but an inspection of the book will show that they are amply justified. Large sections of it are occupied with demonstrations modelled precisely upon those of Euclid; a definition is formulated (that of accelerated motion, *e.g.*) and properties are demonstrated in successive theorems of the object thus defined. In the work itself the interlocutor Salviati is made to claim for Galileo that he has "according to his custom . . . demonstrated everything by geometrical methods, so that one might fairly call this a new science". "For", he continues, "although some of his conclusions had been reached by others, first of all by Aristotle, these are not the most beautiful, and, what is more important, they had not been proven in a rigid manner from fundamental principles."²

The two sciences to which these demonstrative methods are applied are those of mechanics and of kinetics. The former

¹ 1638. I quote from the English translation of Crew and de Salvio (New York, 1933).

² *Op. cit.*, p. 6.

section of the work treats of "the resistance which solid bodies offer to fracture", and of "the cause of cohesion"; the latter of "uniform motion", "naturally accelerated motion" and "violent motions". They are, that is to say, natural sciences in the proper sense of the words.

On the other hand, Galileo insists on the importance of observation and especially of experiment in scientific method. "I greatly doubt", Salviati is made to say, "that Aristotle ever tested by experiment whether it be true that two stones, one weighing ten times as much as the other, if allowed to fall at the same instant from a height of, say, 100 cubits, would so differ in speed that when the heavier had reached the ground, the other would not have fallen more than 10 cubits. . . . But I, Simplicio, who have made the test, can assure you that a cannon-ball weighing one or two hundred pounds, or even more, will not reach the ground by as much as a span ahead of a musket ball weighing only half a pound, provided both are dropped from a height of 200 cubits."¹

It is clear, therefore, that natural science as Galileo conceived (and practised) it contained an empirical as well as a demonstrative element. It remains to determine in what manner these two were combined, and in particular how the former could be admitted without impairing the rigidity of demonstration or reducing it to a merely probable reasoning.

There are several passages in the book in which the relation of the two elements is clearly expressed. Thus the section on "naturally accelerated motion" opens as follows: "The properties belonging to uniform motion have been discussed in the preceding section; but accelerated motion remains to be considered. And first of all it seems desirable to find and explain a definition fitting natural phenomena. For anyone may invent an arbitrary type of motion and discuss its properties; thus, for instance, some have imagined helices and conchoids as described by certain motions which are not met with in nature, and have very commendably established the properties which these curves possess in virtue of their definitions; but we have decided to consider the phenomena of bodies falling with an acceleration such as actually occurs in nature and to make this definition of accelerated motion exhibit the essential features of observed accelerated motions. And this, at last, after repeated efforts, we trust we have succeeded in doing. In this belief we are confirmed mainly by the consideration that experimental results

¹ *Dialogues Concerning Two New Sciences*, p. 62; for further examples of the use of experiment, cf. pp. 42-43, 67, 70-71.

are seen to agree with and exactly correspond with those properties which have been, one after another, demonstrated by us".¹

The definition actually propounded is the following: "A motion is said to be equally or uniformly accelerated when, starting from rest, its momentum (*celeritatis momenta*) receives equal increments in equal times".² From this definition the author then proceeds in a series of theorems to demonstrate conclusions, such, for instance, as that "the spaces described by a body falling from rest with a uniformly accelerated motion are to each other as the squares of the time-intervals employed in traversing these distances",³ or that "the times of descent along planes of the same length but of different inclinations are to each other in the inverse ratio of the square roots of their heights".⁴ Experiment has no relevance whatever to the process by which the conclusions are demonstrated from the definition; this reasoning is capable neither of being confirmed nor shaken by any empirical evidence.

The evidence of experience is relevant to a quite different question, namely, to that whether the motion defined is that which is actual in nature or not. This is ascertained by the use of the two empirical methods of induction and verification. The former of these is employed prior to the definition, when the scientist is seeking examples in order to help him to it; the latter at any stage in the subsequent process of reasoning, when the scientist turns aside from his demonstration of properties in order to check (not the correctitude of his demonstration, but) the correspondence of its results with experienced nature.

The employment of these empirical methods does not, nevertheless, constitute the whole method of the science empirical. Empirical induction by itself could give rise only to the formation of what Locke calls an "abstract general idea", comprising those sensible qualities which are common to all the observed instances, but never to anything capable of mathematical definition. Nor could any reasoning derive from such a purely empirical concept any more than "nominal" conclusions; it must confine itself to the analysis of what is contained in the idea, and is necessarily disqualified precisely in so far as it is a *priori* from being true of nature.

The validity of Galileo's method depends upon the contrary assumption, that induction can give rise not merely to the formation by imagination of a general idea, but to the discovery

¹ *Dialogues Concerning Two New Sciences*, p. 160; cf. pp. 178, 253.

² p. 169.

³ Theorem ii., p. 174.

⁴ Theorem iv., p. 187.

by reason of an intelligible reality.¹ Because it is intelligible, it is capable of (genuine, not merely "nominal") definition; and because it is discovered in the particular objects presented to experience, and not formed by abstraction from particular sensible ideas, properties demonstrated to flow from its definition, are necessarily inherent in natural objects. Subsequent empirical verification will be necessary only in order to check the correctness of the initial induction, and to assure the investigator that the intelligible object of his definition really does correspond to the intelligible essence of the objects presented to his senses. The mere fact that such verification is possible itself presupposes that the definition is the apprehension of the intelligible element constitutive of the being of real things. If it were merely nominal, no subsequent empirical verification could serve either to refute or to confirm it.

The method of Galilean science thus presupposes (a) that it is impossible that nature should not embody a mathematically intelligible scheme and exhibit laws mathematically definable; but (b) that, which of possible alternative schemes it embodies and which of several laws equally definable mathematically it exhibits, can be decided only by appeal to observation and experiment.² This philosophy of nature implies that the world was created by a God whose will was restricted within limits by his understanding, but arbitrary in the choice of alternatives within those limits.

¹ The difference between these two is analogous to that between what Kant calls an "empirical" and what he calls a "pure" or "*a priori* concept". The latter differs from the former (i) in being intelligible, whereas the former comprises sensible qualities, (ii) in being the idea of something which is constitutive of the being of natural objects, whereas the former has no objective counterpart in reality.

² There is a passage of Descartes' *Principles* in which he assigns to experiment precisely the rôle which we have found that it plays in Galilean physics. *Princ.* III., iv., entitled "De phenomenis sive experimentis; et quis eorum usus ad philosophandum". "*Principia autem quae jam invenimus, tam vasta sunt et tam fecunda, ut multo plura ex eis sequantur, quam in hoc mundo aspectabili contineri videamus; ac etiam multo plura, quam mens nostra cogitando perlustrare unquam possit. Sed jam brevem historiam praecipuorum naturae phenomenon (quorum causae hic sunt investigandae), nobis ob oculos proponemus; non quidem ut ipsis tamquam rationibus utamur ad aliquid probandum: cupimus enim rationes effectuum a causis, non autem e contra causarum ab effectibus deducere; sed tantum ut ex innumeris effectibus, quos ab iisdem causis produci posse judicamus, ad unos potius quam alios considerandos mentem nostram determinemus*" (my italics).

It is superfluous to insist again how different is the part played by experience in the method here described from that which it plays in a method of inductive generalisation.

(iii) The process which we have been tracing, in which a rationalist theology is necessitated, even in order to be consistently rationalist, to admit an element of voluntarism into itself, cannot stop short at the point to which we have traced it. The scope of God's arbitrary will must be extended further than merely to the selection of one among alternative possible worlds. The universality of the objects of his intellect entails a further consequence besides that that everything conceivable is indifferently capable of realisation. It entails the consequence that nothing is capable of real existence simply in so far as it is conceivable; for the universal cannot be realised as such. The really existent, although it may realise a universal, must be individual: it must therefore possess a contingent element of being, added to the universal nature and not derived from it. God's arbitrary choice, therefore, cannot be limited merely to the selection of one among possible intelligible schemes, in order to realise it in the creation of the world. Suppose the scheme chosen, it will still be necessary to add to its universal nature an element of particular existence; and since this element, being particular, is not determined by the universal, God's will is arbitrary in the production of it.¹

I have said that the admission of this further element of voluntarism is necessary to a rationalism which is to be consistently

¹ This doctrine also is implicit in Leibniz, in those passages namely which depend on the distinction between the Law of Contradiction and the Principle of Sufficient Reason, with the consequential distinction in the Theory of Knowledge between "truths of reason" and "truths of fact". But here also Leibniz's overwhelming rationalism causes him to withdraw in other passages the concessions made in these. Thus his doctrine of "individual essences" contains the implication that there is nothing in any individual object or event which is not determined by the idea of it which is present to God's intellect, and consequently that there is no stage in the production of nature at which God's will is released from the control by his reason. I do not propose to criticise the doctrine of "individual essences" on its merits, but only to point out that it is inconsistent with the former distinctions. If the intelligible idea is (not universal, but) individual, it will contain in itself the sufficient reason of each individual quality and particular event. The understanding of the singular will require (not the supplementation of reason by appeal to empirical evidence, but) only the further development of reason. The distinction between "truths of reason" and "truths of fact" must be annulled in consequence. There will not be two kinds of truths, the one (sc. the universal) capable of being known *a priori*, the other (sc. the particular) capable of being known only *a posteriori*; but inasmuch as the particular is deducible from the idea no less than the universal, it must be equally with the latter capable of being known *a priori*, so that any empirical element in our knowledge even of the particular must be attributed to defect of our intelligence, not to the nature of its object.

rationalist. This contention may be justified by the following consideration. The admission is found to be inevitable as soon as it is unambiguously recognised that the object of the (theoretical) activity which governs God's will, is a universal concept ; but this recognition must follow immediately, and can only follow, when it has been granted that God's productive activity is governed by rational understanding and not by affection. The clear and unequivocal recognition that God operates by understanding and not by affection, is a consequence in its turn of the doctrine that God produced the world by manufacture and not by generation ; that is to say, it is entailed in the process by which a rationalist theology is extricated from confusion with a pagan one.

This further modification of theology involves a corresponding alteration of the philosophy of nature. The whole being of natural objects cannot now be held to be exhausted in their being the embodiment of intelligible ideas and exhibiting the operation of universal laws. They will, indeed, embody the ideas and fulfil the laws ; but, simply in order either to embody the one or to fulfil the other, they must be held to be endowed with an element of particular being undetermined by either.

The result of this modification of the philosophy of nature will not be to make a *a priori* science of nature any the less possible ; but it will enforce the recognition that such a science, while necessarily true of all natural objects, does not exhaust the whole being of any. Thus experience will have a use beyond any which it has been found necessary to attribute to it so far. It will be necessary not merely to determine which of alternative intelligible schemes is realised in the actual world. Granted that this has been determined, there will still be a particular element in the nature of the actual which is not exhausted in its being the embodiment of a universal scheme. Of this particular element there can be none but empirical knowledge, and thus, although natural science will be itself no less *a priori* than before, yet, since it is admitted incapable of extending to the whole nature of actual things, it must be supplemented by experience if the whole nature of things is to be known.

This conception of nature and theory of knowledge correspond very closely to Kant's. It is a mistake to suppose that Kant was mainly concerned to answer the question which Hume was mainly concerned to ask, namely : How is empirical science possible ? His question, in so far as it concerned science of nature, was the quite different one : How is an *a priori* science of nature possible ? It would perhaps be going too far to say that Kant did not conceive the possibility of an empirical science

of nature at all, but it is true at least that he neither investigated the methods of such a science nor enquired into the conditions of its possibility. Both his theory of knowledge and his philosophy of nature are developed exclusively in answer to the question: How is a *pure* (sc. an *a priori*) science of nature possible? ¹ If it can be claimed for him (as it can) that he avoided even herein the extreme rationalism of his predecessors, this is not because he thought the understanding incompetent to achieve a science of nature *a priori*, but because he recognised that such a science could not exhaust the whole being of any natural object, being limited to what he called the "form" of nature, while the "matter" was accessible only to empirical intuition.

Kant's theory of knowledge thus implies a philosophy of nature identical in its essentials with that involved in a rationalist theology in the last form in which we considered it. It implies, that is to say, that nature is the embodiment of a "form" which is intelligible *a priori*; but that its whole being is not exhausted in its being an embodiment of the "form".

As to the contention, finally, that this philosophy of nature is that presupposed by some modern sciences of nature, I have no direct evidence to offer, but will confine myself to an indirect method of argument which I have employed already in a similar context. Kant himself arrived at this philosophy of nature by reflection on the methods of modern natural science. He did not argue from a theological premiss, but enquired, What theory of nature is presupposed in the possibility of the science of mathematical physics?

¹ Thus the First Critique is expressly declared to be an answer to this problem: How are synthetic judgements *a priori* possible? Cf. the following passages from the Prolegomena: "I think it will be understood that I here do not mean the rules of the *observation* of a nature that is already given, for these already presuppose experience; that I do not therefore mean how we (by experience) can learn from nature her laws; for these would not then be laws *a priori*, and would yield us no pure science of nature; but [I mean to enquire] how the conditions *a priori* of the possibility of experience are at the same time the sources from which all the universal laws of nature must be derived" (p. 68). "The principles of possible experience are then at the same time universal laws of nature, which can be cognised *a priori*. And thus the problem in our second question, *How is the pure science of nature possible?* is solved" (p. 81. I have quoted Mahaffy's translation of both passages).

Of course, it is Kant's contention that the same principles make experience possible, which make *a priori* science of nature possible; hence the problem of the Critique takes the alternative form: How is experience (sc. of particular objects) possible? But it is a gross confusion to identify this with the question: How is empirical science (generalisation from experience of particulars) possible? Hume hardly raised the former problem, or raised in only to shelve it; the latter is his almost exclusive concern.

II.—IS THE SELF A SUBSTANCE ?

BY IAN GALLIE.

THAT the Self is a substance is a proposition which has been asserted and denied many times in the history of philosophy. This at least is the impression one would form from a cursory reading of the subject. But on closer study it becomes questionable whether there is any one proposition which has been entertained by all who have used this form of words : and it is partly in the hope of receiving light on this question that I have written the following paper. I propose to select one thing which I believe several philosophers have in fact meant in asserting the Self to be a substance : to state as clearly as I can what I think it consists in, and how it is related to certain other conceptions : and to discuss some reasons which might be given in favour of its being true.

The question "Is the Self a substance ?" appears to me to be ambiguous only in respect of its predicate. I think we all know quite well about what object the question is being asked. But it is advisable for the purposes of our argument to define or describe it in a way which begs the fewest possible questions. I propose therefore to define it in terms of a certain class of sentences in which the word "I" (or the word "me") occurs. The class of sentences containing the word "I", which are used by any one person, can be divided into at least two groups. The first consists of those in which, if the phrase "my mind" were substituted for "I", the result, even if unusual English, would not be false or misleading. Instances of this sub-class would be : "I feel depressed", "I see it is raining", "I believe it is going to rain all afternoon". Now there is obviously another sub-class in which this substitution is impossible, of which instances are the sentences : "I am under 6 feet in height", "I was once hit by a golf-ball", "I had dinner at 8 o'clock to-night". It is in terms of the first of these uses of "I" that I am going to define the Self, but before doing so I wish to distinguish it from a third, which differs from the other two in being, I believe, a purely philosophical one. Some times, when I am doing or teaching

philosophy, I utter the sentence "I see a white expanse now", or "I hear a noise now", and claim certainty or indubitability for my assertion. But if I substitute "my mind" for "I", the proposition no longer appears to be certain. And I think the reason for this is that if I do substitute "my mind", I seem to be implying some fact about the past, whereas all I want to assert is that something existing now has certain introspectable characteristics. And I usually end by translating the "I" sentence into "There is a hearing now", or some such cumbersome expression. I am therefore convinced that this is a different use of "I" from the first.

Now I assume it to be the case that there is, in the widest sense of the word, some entity or set of entities, to which I am referring on each of the different occasions on which I express a true proposition by a sentence of the first class: and further that if anyone else expresses a true proposition by a sentence of the first class, then there is another entity, or set of entities, to which he is referring, which is generically similar to but numerically different from that to which I am referring. And for the time being this fact is all I wish to express by the statement "There are Selves".

What then could be meant by the assertion that a Self, so described, is a substance? In the writings of the classical philosophers, from Aristotle onwards, the word "substance" has I believe been used to convey at least two different conceptions: it has been used to denote an ultimate subject of attributes, and it has also been used to express the notion of logical or causal independence. A full treatment of the category of substance in its application to the Self, would require a discussion of both these conceptions. But in this present paper my purpose is more restricted. I wish only to consider a certain interpretation of the phrase "subject of attributes"—an interpretation which many philosophers have I think intended to make—on which it is uncertain whether or not the notion expressed does apply to the Self, and worth while to raise the question. And the problems which will concern us can be discussed without reference to the kind or degree of independence which the Self may possess. I propose therefore to replace the original question by the following one: "Is the Self an ultimate particular?"

Ultimate Particularity.—In saying of something that it is an ultimate particular I mean that it has qualities and stands in relations, without either being or containing qualities or relations. This definition excludes all entities which are complex in the way in which the fact that "This is red", or the event consisting in "That noise being heard" are complex. Events and processes

may be particulars, but since they contain qualities or relations as elements, they are not *ultimate* particulars.

It will be noticed that, on my definition, the statement that something is an ultimate particular is a purely ontological one : it ascribes certain formal characteristics which are in no way dependent on a cognizing or symbolizing mind. I am aware that this view is not fashionable with some modern logicians. It is sometimes maintained that categorial propositions—*viz.* those which ostensibly assign entities to categories—are linguistic : to say of x that it is a particular or a quality, is not, we are told, to assert a property of the entity x , but to say of the symbol " x " how it can function in a significant sentence. There is not time to discuss this view here. But it seems evident to me that, unless significance is an intrinsic property of marks and noises, rules regarding the possible combination of symbols must be dependent on the categorial nature of the realities referred to by our judgments : and I can see no good reason for holding that this categorial nature cannot be discovered or be legitimately discussed. Again it is sometimes said that a particular is what can be designated or named. This is not the sense in which I am using the term, but I shall return to this topic later, and try to show how this epistemological use of the term is connected with mine.

Let us now consider what is involved in applying to the Self the category of ultimate particularity. It is most convenient to begin with the notion of mental event or process, which may be taken for our purpose as equivalent terms. No one, I take it, questions the existence of mental events, whatever he may feel about their right analysis : and no one, I trust, will be puzzled or sceptical when, in order to give instances, I say that a mental event occurs if a man is angry at a time or desires something : if at a time he hears a noise or believes a proposition. And the two following statements about the relation of mental events to Selves will also, I think, be agreed to. Whenever a Self exists then there also exists a temporal series, or biography, consisting of those mental events which would be said to constitute its personal history : and whenever n Selves exist, then there also exist n such series. Disagreement begins to be felt when we go on to inquire what is the precise relation between a Self and such a biography. To this question there are I believe two general types of answer, though each may admit of several specific forms. The first type consists in saying that each mental event in such a biography contains a subject constituent which (a) is not itself an event, and (b) is literally and numerically the same in all. This identical constituent is the common referend of all the

propositions of my first class which any one person may assert, and is therefore the Self. We may call this the substrate theory of the relation between a biography and a Self. The second type of answer denies the above proposition, and asserts that the Self is a complex, collection, or set, of which the events which make up the corresponding biography are literally parts or members. This may, for want of a better name, be called the serial theory of the relationship. I think that any account of the relation of mental events to a Self which has the faintest plausibility, must fall under one or other of these two general types. The serial theory admits, of course, of many specific forms, for different views may be taken of the relations required to unite mental events into a Self. And I think that two persons holding the substrate view might differ about the intrinsic qualities of the identical constituent.

Now to say of the Self that it is an ultimate particular, is, I believe, equivalent to saying that some theory of the first or substrate type is true. And I think that this is one of the things which people have in fact meant in asserting the Self to be a substance, though they have usually held a more specific form of the first view—*viz.* that the identical constituent has certain mental qualities, and lacks any characteristics of a spatial or physical kind. In this form the theory is better known as the Pure Ego theory of the Self.

The controversy between substrativists and serialists is one of long standing, but the substrativist at the moment cuts an unfashionable figure. An event view of matter is prevalent in physics, and psychology with a soul seems to smack almost of the middle ages. Now I have no particular brief to hold for the substrativist hypothesis. It seems to me, though, to be a perfectly respectable theory, to be entirely free from the taint of obscurantism—though often charged with it—and to be consistent both with itself and with at any rate a moderate empiricism. The serialist hypothesis on the other hand seems to me beset with difficulties and obscurities: though many of those who cheerfully accept it are, I believe, quite oblivious of them. In particular there are certain questions, concerned with the analysis of events, which it is incumbent on a holder of the serialist view to answer, and which, so far as I at present see, can only be answered by re-introducing the substratum in a modified form. I propose in what follows to state these difficulties as forcibly as possible, and to consider how far the serial theory is able to meet them. I shall then outline and discuss an epistemological argument which might be urged in the substrativist's favour. This argument is not, I believe, a

conclusive proof of the substrate view of the Self, but consideration of it will show what consequences we are committed to, if we reject that view. Our result will therefore be largely negative, but it may serve to set the relative merits of the two hypotheses in a fairer light than that in which they are usually seen.

The Analysis of Mental Events.—The serial or collective view of the Self has considerable plausibility so long as the terms in the series, the mental events, are taken as unanalysed units. But difficulties, I think, begin to arise when we ask, "what is the analysis of a single mental event?", and in particular when we ask the two questions: "what are the constituents of a mental event on the serial view?", and "what makes a single mental event single?". As regards the first of these, it is obvious that at least a great many mental events are internally complex, in particular those which are cognitive, such as my hearing a noise, or my thinking about the moon, since they patently consist in the holding of a relation between something and something else. Now what is the other constituent to which the noise is related in the event which is my hearing it? The serialist may here reply that in asserting the Self to be a collection of mental events, he never meant to include transitive events such as the hearing of a noise: these are higher order events, the subjective constituents of which are intransitive events, or "acts", and it is of these latter that the Self is composed. If he does so, it may be pointed out to him, firstly, that he may no longer pride himself on sticking to the observed facts, for "acts" are not obvious data of introspection; and secondly, that the original question may be raised about "acts" also. If they are events at all, they must be complex, and if they are not transitive, they must consist in the qualifying of something by a character or set of characters—e.g. by a certain determinate feeling tone. For in calling them events we surely imply that in their most generic nature they resemble the entities, called by that name, of whose existence we are directly aware. Now I am acquainted with some events of the intransitive sort—e.g. with noises, and colour expanses, and headaches. And the datum presented to me in these cases is undoubtedly complex: what I am directly acquainted with is not a quality, in the sense of a universal, nor a collection of these: and it is not a "hoc" which in fact is qualified: rather it is a "hoc-quale" or complex unity, whose elements I distinguish by an act of analysis when I make such judgements as "This is scarlet", or "This is throbby". And when I make such judgements, I certainly appear to myself to be discriminating an ultimate particular, in my sense, from a quality which it has—an

ultimate particular which differs in not *containing* qualities from the event of which it is the subject. If this analysis of our judgments of "sense-inspection" is correct, it seems to follow that an event as such involves the existence of a logically simpler entity to be its subject: of a "substratum", if not of a substratum in the usual sense.

So far my argument would show at the most that no view of the Self—and no view of physical objects either—can dispense entirely with the notion of the substratum. But it has no tendency to show that corresponding to each biography there is *one* persistent substratum. There might be as many "substrata" as there are events in the biography, and the main contention of the serialist—*viz.* that the Self is essentially of a collective character—would still be true. But we may now ask: "What is meant by speaking of *one* mental event? And on what principle are we justified in dividing a Self's history into a number of *different* events?"

The Notion of One Mental Event.—These questions are not, I believe, as simple as they look. It might indeed be thought that by reference to temporal considerations a definition of "one mental event" could be found which would obviously be inapplicable to the Self as a whole. For it might be said that a single mental event is the *instantaneous* manifestation of a mental characteristic, or alternatively, one whose duration is shorter than a single specious present. But there are objections to both these answers. The first commits us to entities whose existence is highly suspect. And the second offers a criterion of unity which seems too contingent to give insight into metaphysical distinctions; for to be of a "sensible" duration is surely a very extrinsic and accidental property of whatever possesses it. Nor will it help to say that one mental event means the manifestation of a single determinate characteristic, for we should have to resort again to instantaneous events, to account for continuous change. And in fact we should all speak of "the same event going on", even though it lasted a considerable time and manifested various qualities, provided that the successive phases were interrelated in a specific way. In the special case of mental events the requirements, I believe, are these, that the successive manifestations should be temporally and qualitatively continuous, and further that each should belong to the same mind. This last condition (whatever it may consist in) is clearly necessary, for if two experiences were related by temporal and qualitative continuity, but one was an experience of Smith and the other of Jones, no one would say that they were parts of the same event. Now if

a strand of experiences which satisfied these conditions would be regarded as a single event with discriminable phases, and if an event as such requires an ultimate particular as subject, it seems more reasonable to conclude that such a strand, however long it lasted, would belong to a persisting substratum, than that it would belong to a number of different substratula.

The Unity of the Self.—We must now ask whether a Self's history, taken as a whole, could be regarded as a single long event. This question too, seems to me a difficult one. I am inclined to think, though, that both those who stress the unity and continuity of the Self, and those who like Hume regard the Self as "a bundle of distinct perceptions", are guilty of exaggeration. The latter account is certainly false if it is taken to mean that the terms are more real than the whole which they form, or that the relations uniting them are purely external. Reflection on two facts will convince us of this. Firstly, any theory of the Self must offer some analysis of the statement "This experience belongs to *my* personal history, or more shortly, is *mine*." To this question the substrativist has a simple answer, but if provisionally we reject his hypothesis, we must, I take it, refer to certain relations which hold between "this" experience and those others I also call "mine", and which do not hold between it and those experiences I call "yours". But what are these relations supposed to be? It is clearly possible that two experiences which belonged to different Selves might be similar or even identical in quality; and it is conceivable, in view of the evidence for telepathy and multiple personality, that two experiences might have direct causal connection with each other or be stimulated by the same organism without belonging to the same Self. We must therefore assume, in addition to these, some further relation between "my" experiences, which might be called "co-personality". Now it seems to me clear that only terms with mental qualities could be co-personal, and further that there could not be an experience of any duration at all which was not co-personal with something. For any such experience will consist of temporal parts, and these latter, in order to be parts of one experience, must, as we have seen, belong to the same Self. The relation of co-personality is therefore internal to its terms in at least two senses of that phrase, and this is perhaps what is meant by those who maintain that the Self is as primary and ultimate as its states. And secondly, it is a distinguishing mark of a Self-series—at least of those which we know best—that some later members of the series are not only modified by earlier ones, but are explicit memories of them. Now it seems

quite certain that the cognitive relation which in memory unites a later to an earlier member, cannot be reduced, as Hume thought, to resemblance and causal connection, and very probable that it both constitutes a unique bond between events in the same Self-series, and involves others also. For memory clearly implies something which we call "unity of consciousness" or "Self-Identity", and if this is not the numerical identity of a substratum, it must consist in some "apperceptive" tie between the past and present, which cannot surely be identified with any relation known to relate non-mental terms. It is therefore particularly incumbent on those who reject the single substratum to admit that a Self-series of events is a series of a peculiar and intimate sort, involving relations which are internal to mental terms, and probably quite indefinable. But to allow this kind and degree of unity is not the same thing as to say that a Self-series constitutes a single event in the sense we have given to that phrase, or that it is a single continuum with discriminable phases. For apart from the relations between the *successive* phases, is it certain that the total *simultaneous* state of a Self, within a given specious present, does not comprise a plurality of different events ? I am not sure on what principle this question should be answered : but it is clear that the introspectable contents of a total simultaneous state may be highly diversified. If at a given time I am occupied in thinking of some one and fearing for his safety, and am also involuntarily sensing certain sense-data, these three activities are all united by the co-personal tie : but the first two are more intimately connected with each other, through their relation to a common object, than is either with the third. But even if all simultaneous co-personal occurrences be regarded as parts of the same event, it remains a fact that a Self history is *prima facie* not continuous in time, but punctuated by gaps of unconsciousness. And though the gaps may perhaps be filled with unconscious mental events, we can know these latter only by their causes and effects, and have no reason to suppose that in their intrinsic nature they are qualitatively continuous with the introspectable parts of the series. Nor is it obvious, despite what is often said, that all change in the introspectable series is continuous in quality ; for certain experiences such as acute pain or surprise appear to start quite suddenly and to be qualitatively discrete from the preceding state of mind.

It might here be objected that we frequently speak of the same event going on, even when there are temporal gaps between the successive phases—*e.g.* in the case of a tune. This is certainly true, but I believe not relevant for the following reason. The

notion of "the same event", in our ordinary thought, is essentially a vague one, and if one attempts a precise definition it will certainly fail to cover all uses of the term. Now the definition I have suggested is not intended to be comprehensive, but merely such that the members of a succession which answered to the definition would most plausibly be regarded as states of a persistent particular. But this does not appear to be true of the looser and more popular uses, which often contain a large subjective element. For if in the absence of temporal continuity between the members we regard a temporal complex as one event, this is because our imagination is able, as Hume puts it, to pass smoothly along the series, and what facilitates this smooth transition may be no intrinsic property of the complex, but merely its relevance to some subjective purpose in the judge, or even the mere frequency and familiarity of its occurrence. Sometimes, it is true, the unity may be more objective : for a temporal series, such as a tune, may possess as a whole some form or Gestalt quality, not possessed by its constituent parts, and in such cases no doubt it is our awareness of this quality which determines us to call the series "one". But the unity displayed by a complex in virtue of a temporal form quality, though genuine and objective, seems too loose to necessitate identity of ultimate subject ; and in any case it is doubtful whether this peculiar type of unity is characteristic of the Self's history as a whole, though it is certainly characteristic of shorter temporal strands within that history, such as processes of inference or acts of volition.

I am therefore inclined to conclude that a Self's history is in principle divisible into a plurality of mental events, though their mode of connection is gravely misdescribed by speaking of a bundle, or collection ; and in particular that it cannot plausibly be regarded as a single event in that sense of the term which requires a numerically identical subject. The upshot of the preceding argument seems to be this, that though we cannot dispense with the notion of the substratum, there is in the case of the Self no cogent reason for preferring one to many. A modified form of serialism is therefore possible, though the theory requires a more careful statement than serialists have usually recognized.

The Epistemological Argument.—We will now turn to the epistemological argument, which may be approached in the following way. While it is clear that my Self exists in the sense that there is an entity or set of entities, to which I am referring in some way when I use the word "I", it may be disputed in what precise way I am doing so. Suppose I express a true proposition by the words "I am puzzled". The grammatical form of my sentence

suggests, *prima facie*, that what I am doing is to predicate the quality "puzzled" of an object of acquaintance, which I am naming or designating "I". Now it might be held that what is suggested by the verbal form is really the case, and that sometimes at least, I use the word "I" as a logically proper name for my Self. This might be called the view that the Self is an Intuitum. It would be more usual, however, to hold that the word "I" is never used as a logically proper name, but is always a concealed descriptive phrase; and that in consequence the sentence "I am puzzled" is a misleading guide to the nature of my judgement, since it suggests that the judgement is about my Self in the direct sense of containing my Self as one of its objective constituents. This second view admits of a milder and a more extreme form. For it might be held (1) that the sentence "I am puzzled" is misleading only in respect of its grammatical subject, and that the meaning of my judgement would be adequately expressed if for the original sentence were substituted some sentence of the form "The only instance of ϕ —e.g. the only owner of such and such experiences—is puzzled". Or it might be held (2) that the sentence "I am puzzled" is misleading in respect both of its subject and predicate, since the word "I" conceals a description of such a type that, when it is explicitly stated in words, the original predicate of the sentence must also be altered if the result is to be a significant assertion. If for example ϕ were the characteristic of being a class or series of a certain kind—e.g. a series of mental events which all have a certain relation to a given event—it would clearly be nonsense to assert that something both answers to this description and "is puzzled", though it might be sense to say that it contains a feeling of puzzlement as a member. We might distinguish these two varieties of the second view as the theories (1) that the Self is a Descriptum, and (2) that it is a Logical Construction.

What is the relevance of these alternatives to our problem? Since I hold that the concept of particularity is an ontological one, no one of the three alternatives is for me identical either with the assertion or the denial that the Self is an ultimate particular. But I think nevertheless that the following implications can be seen to hold. If the Self is either an Intuitum or a Descriptum, it will follow that it is an ultimate particular: and if it is not an ultimate particular, it will follow that it is a Logical Construction. If therefore it could be shown that the Self is either an Intuitum or a Descriptum, it would be proved that it is an ultimate particular. Now although it is not possible, I think, to decide on purely epistemological grounds between the two forms of

descriptive view, it may be possible to prove on epistemological grounds that *any* form of purely descriptive view is false and that therefore the intuitive view must be true. This attempt at least has been made by McTaggart, and I propose to consider it.

But an objection will certainly be raised at the outset. The fact, it will be said, if it be a fact, that the Self is an object of acquaintance, can have no tendency to show that it is an ultimate particular. For in the first place those objects which are generally agreed to be objects of acquaintance, such as sense-data, are not ultimate particulars, but unities, or events; and as a matter of historical fact, the substratum was discarded by the more radical empiricists just because there was no "impression" of it. I believe, though, that these objections can be met by drawing certain distinctions, and that there is a sense in which a substrate Self could be known by acquaintance, whereas such knowledge would be quite impossible if the serial view of the Self were true. For to take the latter point first, the Self is, on any form of the serial theory, a complex of processes extended in time. And to say that I am acquainted with it—as opposed to a part of it—must mean that I have to the whole series the same cognitive relation which I sometimes have to an event which falls within a single specious present. Now even if I can be acquainted with some events which are past (and this is disputable), it is manifestly impossible that I should at a given moment be acquainted with the whole of a process which extends perhaps for years into the past. If on the other hand I am a substratum which is the identical constituent of my successive states, I may, I think, in introspecting one of these states be acquainted with my Self, though not in quite the same sense as I am with the event of which my Self is the constituent. The relation between these two senses may be briefly indicated thus. If and only if I am acquainted, in the usual sense, with a sense-datum, *e.g.* a colour expanse, I can "know by acquaintance" certain facts about it or about its constituents: I can know *e.g.* "that this is red", or "that this red patch adjoins that white one". Such knowledge, though it consists of judgements, may be called "knowledge by acquaintance" because it is based in a peculiar way on my being acquainted with the colour expanse. Now I think it is legitimate—and it has in fact, through failure to distinguish the two senses, been customary—to say that I am acquainted with *x* provided *x* is something about which I "know a fact by acquaintance", even if *x* is not an object of acquaintance in the usual sense, but a constituent of the latter which can only be discriminated by an act of analysis. It is therefore possible that the Self may be

known by acquaintance, but only on the supposition that it is an ultimate particular which is the identical constituent of the events which make up its history. McTaggart does not distinguish these two senses of acquaintance, but his failure to do so makes no substantial difference to the relevance of his arguments for our purpose.

McTaggart's Argument.—McTaggart's defence of his thesis is contained in his essay on "Personality" in *Philosophical Studies*, and in the chapter on "Spirit" in the *Nature of Existence*, Vol. II. The two accounts are almost identical, and where I quote I shall do so from the essay. He begins by asserting that there are some characteristics of which he is aware—e.g. equality—and that he therefore knows the proposition "I am aware of equality". But if this proposition is known to be true, the Self about which it is made must be known somehow. And if it is not known by acquaintance, it must be known purely by description. From this point onwards he proceeds to try and show that it can be known by description only on the supposition that it is *also* known by acquaintance.

Starting with the proposition "I am aware of equality" he first considers the suggestion that the Self might be known by the description "that which is aware of this awareness". But this is dismissed, for it is conceivable that more than one Self might be aware of the same mental event. So we pass to the second suggestion that my Self might be known as "that which *has* this awareness of equality". I will here quote his actual words. "The attempt to know it on this basis would be as follows. If we start from 'I am aware of equality' and wish to describe the 'I', we must proceed to the further proposition 'I have this acquaintance with equality' which will always be true if the other is. Then the 'I' in the latter proposition can be described as the Self which has this acquaintance with equality. . . . But the new attempt is still open to the objection—that it involves that two descriptions apply to the same Self, and that we have no right to make this assumption. For when I assert the proposition 'I have this awareness', it means that the Self who has this awareness is the same as the Self who asserts the proposition. Now I can only describe the one . . . as the Self which has this awareness, and the second as the Self which makes this judgement. Both of these are exclusive descriptions. . . . But I have no right to suppose that they refer to the same Self, and therefore I am not entitled to say, 'I have this awareness', or consequently, 'I am aware of equality'. If on the other hand I am aware of myself I am entitled to say 'I have this awareness', because I am

aware of myself with the two characteristics of having the awareness and of making the judgement. . . . Nor is this all. The same line of argument will show that unless 'I' is known by awareness, I am not justified in making any statement about myself, whether it deals with awareness or not" (*Personality*, p. 78).

Certain details in this argument are rather obscure, but I think the essential point which McTaggart wishes to make may be put as follows. If I am to know that a characteristic ϕ is an exclusive description of x , I must in the first place know that only one thing could have ϕ . But this, which might be known from mere inspection of the characteristic, is clearly not enough. I must also know that one thing in fact has ϕ , and that this thing is x . And to know this latter fact is equivalent to knowing that one thing is the only instance both of ϕ and of ψ , where ψ is the characteristic which we always or normally think of when we think about x . In the case of the Self, ψ is the characteristic of being "the person who is making this judgement": and therefore to know my Self by a description ϕ , I must know that one and the same Self is both the only instance of ϕ and is also the Self who is making this judgement. But I could not know this, unless I directly perceived my Self to possess these two characteristics. If therefore there is knowledge of my Self by description, there must also be intuitive knowledge of it. Now there are certain propositions about my Self, which I know—and not merely believe—to be true. And each such proposition either consists in or contains the assertion that a certain characteristic is uniquely descriptive of me. Therefore there *are* times when I am acquainted with my Self, and designate it by the word "I" used as a logically proper name.

If this is the argument, we must ask, first, whether McTaggart succeeds in proving that all descriptive knowledge of the Self entails intuitive knowledge of it. This conclusion certainly follows, I think, if he is right in his two contentions—(1) that all the propositions which I could know about my Self are of the form, "the Self who is making this judgement is also the so and so", or "the Self who is making this judgement is also such and such", and (2) that Self-acquaintance is necessary to the knowledge that two different characteristics belong to the same Self. Now to the first of these contentions there seems to be one obvious exception—namely the proposition "I exist". For if McTaggart is correct in his account of the normal meaning of the word "I", when it is used descriptively, this proposition should mean "there is something answering to the description of the Self who is making this

judgement". And I could know this proposition to be true, without Self-acquaintance, provided I was acquainted with this judgement, knew the description to be exclusive, if applicable at all, and further knew that every mental event must belong to some Self. But apart from this fundamental proposition, all others which refer to my Self appear to assert the co-inherence in one and the same Self of two different characteristics, and it is certainly hard to see how I could *know* this, as opposed to merely believing it, unless I was acquainted with my Self. McTaggart's conclusion is therefore highly plausible. But I think it would be rash to say it was proved. For let us suppose for the moment that the serial analysis of the Self is true, and that therefore there is no Self acquaintance, and consider the proposition "the same Self has the two characteristics of making this judgement, and of having this awareness". Now it seems to me just possible that even on this analysis of the facts the above proposition might be known to be true. For on this analysis, the proposition will *mean* "the event which is this judgement, and the event which is this awareness, belong to the same co-personal series", and co-personality will consist, as we have seen, in an indefinable relation (or set of relations) directly uniting the events which are said to belong to the same Self. And it seems to me possible that in introspecting two simultaneous mental events, I may know by acquaintance not only that they have such and such qualities, but also that they stand in this direct co-personal relation to each other, just as I may know by acquaintance that two visual sense-data stand in a certain spatial relation to each other. And if this is so, McTaggart, while right in saying that I must be acquainted with something more than mental events, if I am to know the proposition 'I have this awareness', is wrong in supposing that the something more must be another *particular*—*viz.* the Self: for the something more may be just the *fact* that the mental events are directly related to each other in a specific way.

But McTaggart's view is certainly a plausible one, and therefore it is worth while to ask the further question—If descriptive knowledge of the Self did entail intuitive knowledge of it, would this prove that Self-acquaintance was a fact? Again I am inclined to hesitate, for two reasons. The alternative is to reject all descriptive *knowledge* about my Self, and this is regarded by McTaggart as too unreasonably sceptical to merit consideration. But I believe that it appears unduly sceptical only if we regard all propositions in whose verbal expression the word "I" occurs as being about the Self, and that the cure for this scepticism is to recognize that the word "I" is used in several different senses,

and in particular to recognize the distinction drawn at the beginning of this paper between the first and third class of "I" sentences. It is certain that I do from time to time know facts which I express by saying—*e.g.* "I am hearing a noise now", but I think it is quite likely that in all such cases the sentence belongs to the third class, and that the use of "I" is such that the meaning and certainty of the proposition would be altered if the phrase "my mind" were substituted for "I". And I am inclined to think that all I am knowing in such cases is that an introspected mental event has certain introspectable characteristics, though my sentence misleadingly suggests that I am knowing something more,—namely a fact about my Self. If therefore we recognize that there are different uses of "I", we can reject descriptive knowledge about the Self without rejecting any propositions which we certainly know to be true.

My second reason for hesitation is this. McTaggart, as we have seen, assumes without argument that the word "I", when used as a description of the Self, always means "the person who is making this judgement". Now if this contention is right, Self-acquaintance is certainly sufficient and very likely necessary to give him the knowledge of propositions about himself which he demands. But I seriously doubt whether this is what I do mean by "I" when I assert a proposition of my first class. It is doubtful to begin with whether McTaggart's view is even a possible one. For if "the person making this judgement" is the meaning of "I" in any proposition of the form "I am aware of *x*", it looks as though any such proposition would be part of its own analysis and therefore meaningless. But I think this objection might be escaped provided we distinguish the meaning of "I" for the person uttering and for those who merely hear the sentence. For suppose *P* to be a proposition of the form "I am aware of *x*", which is enunciated by me. Then for me the enunciator, the word "I" may mean "the person making this judgement", for the judgement is an event which I am acquainted with and can designate "this", without referring to *P*. But for my audience "this judgement" could only mean the judgement which is correlated with *P*, and on this interpretation of the word "I" the original proposition would for them be meaningless. But though McTaggart's view may be possible, I doubt whether it is true, for the following reason. If "I" means "the person making this judgement", then a great many propositions of my first class would still be true, even if I was completely mistaken in thinking that I had a past. Now whatever I do mean by "I", I think it is such that any one of these propositions would be false

if I had not had a past but had literally come into existence at the moment before asserting it, and that it is in fact of the form, "the person who both has had certain experiences in the past and is having these experiences now." Such a description is exclusive if it applies to anything at all, but that it does apply to anything cannot be guaranteed even by Self-acquaintance, at least not by any form of Self-acquaintance which it is at all plausible to hold. And if this is so, Self-acquaintance is not sufficient to guarantee the truth of those propositions which McTaggart thinks it is so sceptical to doubt. These considerations dispose me to think that possibly no proposition about my Self is strictly *known*, though many are certainly believed with a high degree of psychological conviction. McTaggart's case for Self-acquaintance seems therefore to be inconclusive, and it must be admitted that though I may very well be acquainted with my Self, and though this would entail that the Self is an ultimate particular, the latter conclusion is not proved in the preceding argument.

It is time to bring this paper to a close. But I wish, before doing so, to make two more brief observations. The first is this. When I think of my Self, the description always includes, I believe, the property of being the only person who is having *these* experiences now. But it is not obvious to me that it even includes what McTaggart emphasises, the property of "making this judgement". For I do not think it is true that whenever I judge about my Self I am thinking of the judgement I am making, though no doubt I am usually acquainted with it. More often I appear to be thinking of my Self as the person who is having *these feelings* and *these organic sensations*. There is at least some kind of *bodily* reference in the description, even when the "I" proposition is of my first and not of my second class, and this amount of truth at least seems to be contained in the assertion that "the Self of self-consciousness is an embodied Self", though its author would no doubt repudiate my interpretation of it.

My second observation is as follows. If the Self is not an Intuitum, it is either a Descriptum or a Logical Construction: and if it is a Descriptum it is an ultimate particular. But as I have said I can see no epistemological grounds for deciding between these two views. On the other hand, I believe on psychological grounds that our ordinary beliefs presuppose the theory that it is a Descriptum. What I wish to say may be best put in this way. It might be contended that when I say "I felt depressed yesterday", the truth of the proposition which I express is independent of any theory as to its proper analysis, and that the two varieties of descriptive view are just theories about its proper

analysis. Now I believe that in certain cases this distinction may be too sharply drawn, and that in drawing it we ought to recognize that ordinary thought and language may come in time to absorb, unconsciously, a certain analysis of the facts referred to—an analysis perhaps thought out originally by some outstanding thinker, such as Aristotle or Descartes. And in this particular case I believe that we have in our ordinary thought absorbed the analysis which presupposes the single substratum, and that when I say "I felt depressed yesterday" I mean that literally one and the same thing exists with certain properties now and was depressed yesterday. If therefore the Self as we have defined it is a Logical Construction, there will be another sense of the word in which it will be true to say that the Self is not a Logical Construction but a fiction; just as the Equator would be not a Logical Construction but a fiction, if we all meant by "the Equator" an actual line which runs round the world. But this, I think, is compatible with saying that the Self, as defined by us, is, even on the view that it is a Logical Construction, a perfectly real and genuine thing.

III.—STOUT ON UNIVERSALS.

BY HELEN KNIGHT.

IN his Henriette Hertz lecture of 1921¹ Prof. Stout makes two interesting claims. He expresses one by the phrase "characters are particular". The other consists in giving a certain analysis of characters, such as red and completely determinate shades of red. My purpose is to consider the issues raised by these claims. Stout rightly points out that they are highly controversial, and in giving his lecture he has certain opponents in mind, the philosophers who say that characters are universals. I shall in my first section give Stout's own account of the matter, and in my second take up these points from a critical point of view.

I.

I shall start by discussing two senses in which he uses the word 'character', for unless we see that he is using it in these two senses we shall not be able to understand his claims. Understanding of them has in fact been impeded because he himself does not point them out. And pointing out is required, because we are not concerned with a well-established and consequently obvious difference. On the contrary, we get the impression that the word is being used in one sense only. But once a suspicion of the difference arises it is easy enough to substantiate the point. Consider what he says at the beginning of the lecture: "To say that particular things share in the common character is to say that each of them has a character which is a particular instance of this kind or class of characters."² And then he tells us that the terms class, kind and sort all express "the same ultimate form of unity, the distributive unity which comprehends what are for that reason called members of a class, instances and examples of a sort or kind."³ Here Stout is trying to explain what we mean when we say, for example, that two

¹ This lecture is included in *Studies in Philosophy and Psychology*, Macmillan & Co., Ltd., London, 1930.

² *Op. cit.*, p. 386.

³ *Op. cit.*, p. 386.

things are red. In other words, saying that two things are red is a specific case of saying that two things share in a common character. Thus red is a character, a common character in which particular things share. And, according to Stout, when we say a thing is red we are saying that it has a character which is an instance of a certain class. Thus an instance is a character. But red is certainly not an instance, and thus Stout is using 'character' in two senses, the sense in which red is a character and the sense in which an instance is a character. And since, in his view, to predicate red is to predicate an instance, it is clear that he wants to analyse the one in terms of the other. But before discussing this analysis I want to point out some differences between these two senses of 'character'.

We might describe the first of these as "the ordinary philosophic sense"—it is the sense in which the characters we speak about in current speech, red, square, etc., are characters. The term has a wide range of application—not only red and square, but generous, dusty and solubility in *aqua regia* are characters. Stout's discussion, however, is limited to a certain class of characters, to sense qualities. I use this term to include both absolutely specific and generic characters, both the characters of sense data and the characters of things.

All characters agree in two obvious points. (i) In the first place it is always nonsense to say that two characters, whether generic or absolutely specific, are exactly alike. I will illustrate this by an absolutely specific shade. Consider two uni-coloured spots of exactly the same red. To say they have two shades is false, to say they have two shades which exactly resemble each other is nonsense. But we do say that the colour of one spot is exactly like the colour of the other, and we must consider this statement. It looks very like 'this chair is exactly like that', which, of course, entails that there are two chairs. But this resemblance lies in the sentences, and not in what they express. For if the colour of one spot resembles that of the other then both spots are of one colour. We might, for example, say: 'The colour of this spot is exactly like the colour of that. These spots are both of one colour, whereas those (indicating two other spots) are of two.' Thus the statement does not entail that two colours are exactly alike. (ii) In the second place every character, except a definite description, is predicable of more than one thing. Whether it is in fact predicated of several things or not is simply contingent.

Now Stout's other sense of 'character', where it is equivalent to 'instance', is radically different, and by no means ordinary.

To see the difference between instances, and characters in the ordinary sense, we have only to consider that two instances can be exactly alike, and that no instance is predicable of more than one thing. For the first of these points consider the following passage: "Concrete things are diverse from each other in a way which cannot be resolved into difference of kind. They are numerically distinct independently of their similarity and dissimilarity. In just the same way I maintain that one quality or relation may be numerically diverse from another, though both are precisely of the same sort."¹ What does Stout mean by "both are precisely of the same sort"? I suggest he would agree to substitute "both are exactly alike" in a special sense of 'exact likeness' that applies only to qualities and relations, but is comparable to exact likeness between things. In other words he is saying that two characters can be exactly alike in a sense analogous to things. And the second point, that no instance is predicable of more than one thing, simply follows from this.

These points also show that ordinary language contains no names of instances. I am not saying that we never speak about them, for that would be to beg the issue which Stout is raising. But it is certain that we have no names for them in the sense in which 'red' is the name of a character.

We shall now find it easier to understand Stout's claim that characters are particular. For it is clear that he is only speaking of instances, and not of characters such as red and square. But we have still to ask what he means by calling them particular. I should say that he is making the conjunctive assertion: two instances can be exactly alike and no instance is predicable of more than one thing. "Concrete things", he says, "are diverse from each other in a way which cannot be resolved into difference of kind." And similarly, "the roundness of one billiard ball may belong to the same *infima species* of shape as that of another, and yet there may be two shapes and not one shape. Hence I call the shapes particular just as I call the billiard balls particular".²

Stout denies, I must admit, that he means by "'particular character' a character which is predicable of one thing only". And he says: "I could not define 'particular character' in this way for the very sufficient reason that I can discover no means of distinguishing two concrete things except by distinguishing their characters".³ I am not quite sure what he means, but I suppose

¹ *Are Characteristics Universal or Particular?* Supplementary Vol. 3 of the Aristotelian Society, p. 114.

² *Ibid.*

³ *Ibid.*

he is referring to his definition of a thing as the complex unity of its instances, and wants to point out that on this view we can only define 'particular' as applied to a thing in terms of 'particular' as applied to instances. And he thinks it would then be vicious to define 'particular' in the more ultimate sense as predicable of one thing only. But I believe this is mistaken. We should be giving the following definitions: (i) "instances are particular" = "instances can occur in only one complex unity", (ii) "things are particular" = "things consist of instances which can occur in only one complex unity", and these are not vicious.

Stout's second claim is to analyse characters such as red and absolutely determinate shades of red, *i.e.*, both generic and absolutely specific characters. And he wants to analyse them in terms of instances. I do not mean that he ever uses these words, but that they describe his procedure. And before stating his claim I shall say a few words about this analysis. My intention is simply to explain how I am presenting Stout's theory, and I make no attempt to discuss the problems which philosophical analysis raises.

I take it that analysis of characters is partial analysis of predicative propositions. Thus part of Stout's claim is to give a partial analysis of propositions such as 'this book is red'. Any proposition which we propose to analyse is expressed in a certain sentence. The aim of analysis is to find another sentence which has the same meaning, and therefore expresses the same proposition, but expresses it more clearly. Accordingly we state an analysis by using the mark of equivalence between two sentences as, *e.g.*, 'this is red' = this contains an instance of red. And the second sentence must be clearer than the first. We can only see what is meant by "clearer" in this connection by considering examples. Obviously the analysing sentence is not clearer because it explains the meaning of a word or sentence which we do not understand, for we understand the original sentence perfectly.

Our analysis in the present case will be partial because it leaves part of the proposition unanalysed. Stout claims, for example, to give the analysis of 'round' in 'this billiard ball is round'. And it is clear that this does not involve a complete analysis of the proposition. It would have been more satisfactory to consider the analysis of round in 'this sense-datum is round', as this is both simpler and more ultimate. But I doubt whether Stout differentiates between the roundness of sense-data and the roundness of things.

Stout claims to analyse both red and absolutely specific shades of red, *i.e.*, both generic and absolutely specific characters. Thus he is making two different claims, and I shall consider each separately, beginning with generic characters. "What then do we mean", he asks, "when we say, for instance, that roundness is a character common to all billiard balls? I answer that the phrase 'common character' is elliptical. It really signifies a certain general kind or class of characters. To say that particular things share in the common character is to say that each of them has a character which is a particular instance of this kind or class of characters".¹ And later he speaks of redness and colour as classes.² Thus, according to Stout, in saying 'this is red' we are saying of some class that this has an instance of that class. We are saying 'this has an instance of red' where 'red' stands for a class of instances. Of course 'red' has a different meaning in 'this is red' and 'this has an instance of red'. In the first sentence it stands for a character in the ordinary sense, and in the second for a class of instances. And according to Stout we are referring to such a class wherever we predicate a generic character.

On what, he asks, does the unity of such a class depend? and answers that it is ultimate. The instances which make up a class resemble each other, but the unity of the class does not depend on resemblance, "the distributive unity of a class or kind is an ultimate and unanalysable type of unity".³ It comprehends both instances and the relation of resemblance between them. It is a *fundamentum relationis*. "A relation of above and below as subsisting between *a* and *b* presupposes a spatial complex including both *a* and *b* and the spatial relation between them. In like manner, resemblance presupposes a complex unity of the peculiar type which I call the distributive unity of a class."⁴ The unity of a class is not a relation but a 'tie'.

We can put Stout's point about this ultimacy in the following way: Suppose we consider a different kind of class, for example, the class of crocodiles. Stout would say that membership in this class depends on the common property of being a crocodile. But membership in a class of characters is ultimate. An instance of red belongs to the class red, and an instance of green belongs to the class green, and no further explanation is required. In other words there is an ultimate tie between the instances of any one class.

¹ *Studies in Philosophy and Psychology*, p. 386.

² *Op. cit.*, p. 398.

³ *Op. cit.*, p. 387.

⁴ *Op. cit.*, p. 388.

I think we can also say this : If anyone asks, what do you mean by 'red', when it stands for a class ? Stout's answer would be 'I mean this' (pointing to an instance) 'and all other instances of the same class'. But is it necessary to indicate a given instance ? I cannot be sure what Stout would say, as he does not raise this question. But we can only avoid pointing if we suppose that every class involves a different tie. In that case we could say 'I mean all instances comprehended in the tie so-and-so'. But I take it that in Stout's view there is only one tie—the tie which constitutes membership in a class of instances. And in that case we can only distinguish one class from another by pointing to a given instance.

Stout compares his position with that of the nominalists. He says they agree with him in thinking that characters are particular. But they differ from him in a very important point, since he believes that the unity of a class is ultimate, while they claim to explain it through resemblance. But this, he maintains, is indefensible, and gives the following reason : "Distributive unity is signified by such words as 'all', 'every', 'any', 'some', and the indefinite article. Can the meaning of these words be stated adequately in terms of resemblance ? This is plainly impossible."¹ But the nominalists make use of formulas which include them.

We can put his argument like this : The nominalist agrees with Stout that in predicating red we are talking about a class of instances. But if we ask him, what class are we talking about ? he will give some such answer as 'the class formed by this (pointing to an instance) and all instances that resemble it'. And this answer includes the word "all", "which has a meaning of its own that cannot be reduced to relations of similarity".²

Stout says very little about the analysis of absolutely specific characters. However he says the following : "If A and B are two concrete things, in what sense can it be true both that A is round and that B is round ? Let us suppose that the roundness is absolutely specific. . . . According to me, what we assert is that some particular example of an absolutely specific sort of quality belongs to A, and that a particular example of the same sort of quality belongs to B. We do not assert that it is the same instance of roundness in general which belongs to both."³ From this I take it that he intends to give the same kind of analysis for absolutely specific as for generic characters. Compare his analysis of the former. "To say that particular things share in the

¹ *Studies in Philosophy and Psychology*.

² *Op. cit.*, p. 387.

³ *Are Characteristics Universal or Particular ?*, p. 117.

common character is to say that each of them has a character which is a particular instance of this kind or class of characters."¹ It is clear that "a particular example of the same sort of quality" is a member of a class of instances. And how does this class differ from a class involved in generic predication? Simply in consisting only of instances that exactly resemble each other.

It is important to pay attention to this point. It is connected with his claim that characters are particular, and constitutes his chief disagreement with the philosophers who say that characters are universals. We shall later consider this disagreement in detail. It is clearly not what the two statements 'Characters are particulars' and 'Characters are universals' suggest. For Stout's remark applies to instances, and theirs applies to characters in the ordinary sense. And, indeed, the latter amounts to very little, for it simply follows from a fact about the use of the expression 'is a universal'. As Prof. Moore points out "there is one well-established usage of the expression 'is a universal', which is such that, in that sense, every character without exception . . . is quite certainly a universal: that sense, namely, in which 'is a universal' is simply logically equivalent to 'is either predicable of something or is a relation'."² But no doubt adoption of this usage is significant, and there is certainly a great deal of disagreement between Stout and these philosophers. According to him they believe that a "common quality is indivisibly single",³ or, in other words, that it "belongs indivisibly to everything it characterises",⁴ and that 'colour' and 'redness' are singular terms "each standing for a single positive quality".⁵ These views unquestionably are incompatible with his, but we have still to ask whether these philosophers accept them.

II.

In coming to criticism I want to emphasise the distinction between generic and absolutely specific characters. It is quite easy to see this up to a point. It is easy to see that there is a difference between red and the completely determinate shade of the red book I am now looking at. It is easy to see that this shade is more determinate than red and scarlet. But then we might say that it simply differs from red in the way that scarlet differs. Whereas, in fact, it also differs from red and every

¹ *Studies in Philosophy and Psychology*, p. 386.

² *Are Characteristics Universal or Particular?*, p. 113.

³ *Studies in Philosophy and Psychology*, p. 385.

⁴ *Op. cit.*, p. 395.

⁵ *Op. cit.*, p. 397.

generic character in quite another way. It is most important to see this difference because the problem of generic characters depends on it. Unless we see it we shall not understand what the problem is, and accordingly not understand many of the discussions about universals.

I shall try to describe this difference by referring to names in Mr. Russell's sense—we can have names for absolutely specific but not for generic characters. When Russell introduced a new sense of name (or proper name) he limited it to particulars in his sense of 'particular'.¹ But in the *Principia Mathematica* he defines it as a "name directly representing some object".² Prof. Moore points out³ that to see what this means one has to consider the relation of 'this' to what it names in certain conditions. Russell himself considers the relation of 'this' to what it names in 'this is white', where 'this' names a sense-datum with which one is acquainted.⁴ But we can also consider another case. Suppose I am looking at a red sense-datum, and say 'I like this', using 'this' for the absolutely specific shade of red I see. Consider the relation of 'this' to the colour which it names. I do not know whether Russell would agree that 'this', in these conditions, is a proper name in his wider use, but it is related to its object, the absolutely specific shade, in the way he has in mind. Hence I call it a name in Russell's sense. In order to avoid divergence from ordinary language it is customary to refer to a name in this sense as a logically proper name.⁵

We use very few words in this way—we use 'this' and 'that', but only on rare occasions. And in still more exceptional cases we might use some other word, if, for example, we used a generic name for an absolutely specific character. But the relation between word and object is usually far more indirect. The relation between generic names such as 'red' and generic characters is indirect. And if we can see this indirectness we shall get some idea of the difference between them and absolutely specific characters to which I am calling attention. Suppose we say of an absolutely specific shade 'I like this', and add, still speaking of the colour, 'this is red'. Consider the relation between 'this' and the absolutely specific shade, and then consider the relation

¹ "Particulars = terms of relations in atomic facts." "Proper names = words for particulars." See his article on "The Philosophy of Logical Atomism" in *The Monist*, 1918, pp. 521-526.

² *Principia Mathematica*, 2nd edition. Cambridge University Press, 1925, p. 66.

³ In lectures.

⁴ *The Monist*, 1918, p. 524.

⁵ Russell calls it a name in the "logical sense of the word". *The Monist*, 1918, p. 524.

between 'red' and what it means. It is clear that nothing is related to 'red' as the absolutely specific shade is related to 'this'. The important point is this: we can have logically proper names for absolutely specific characters, and we cannot have them for generic ones. We have no words at all for the former in the sense that 'red' and 'square' are words for the latter. But we do use 'this' and 'that' as logically proper names for them. Whereas it is impossible to use any word as a logically proper name for a generic character.

That is why generic characters give rise to a special problem. We cannot point to red as we point to an absolutely specific shade, but want some other way of indicating it. Of course this needs to be qualified. We all know very well what we mean by 'red', and we can point to a colour and say, 'that's red'. There is a sense in which we know what we mean, and a sense in which we do not, and to grasp the philosophic problem we have to see the sense in which we do not.

A great many discussions about universals are attempts to solve this problem. Many philosophers have seen it, and the use of various negative phrases for generic characters marks their awareness. Thus Stout, for example, denies that red and colour are single positive qualities, and some philosophers have denied that the species is "numerically one" in different individuals. The phrases "not a single positive quality", "not numerically one in different individuals", "not a character for which we can have a logically proper name" are all used in attempts to describe the same fact. And if none of them hit the mark they do at least show in what direction we must aim. And philosophers have tried to get beyond these negative points, and show what generic characters are. This accounts for their attempts to analyse them; and we must realise that philosophers have used this method without using this name for it.

But we must distinguish between seeing the problem and seeing it clearly. And to be clear about it we need, in the first place, an accurate description of the difference between absolutely specific and generic characters, and secondly the right method of showing what the latter are.

I shall now return to Stout's claims, and consider them first in relation to absolutely specific characters, and then in relation to generic ones. And I must confess that in what I have just said about absolutely specific characters I have decided the issue against him. I have been saying that we can have logically proper names for them, which is precisely what he denies. He would say, I take it, that we can only have such names for instances;

that when I point to a specific shade and say ' I like this ', I am using ' this ' as the name of an instance. And whenever we speak about absolutely specific characters we are speaking about instances of a certain class—in other words our statement is of the same type as a statement about generic characters. Thus to say that A and B are exactly alike in colour is to say that they contain instances which exactly resemble each other.

Stout is quite right in thinking that he differs vitally from the philosophers who say that characters are universals. He says, we may remember, that in their opinion, a common character belongs indivisibly to everything it characterises. And he is partly right in this, for they do believe it about some characters. In other words they believe that we can have logically proper names for the absolutely specific characters of sense-data.¹ And this is what Stout denies. We can also see the difference between them by considering " A and B are exactly alike in colour ". Both he and they would agree this entails that A and B have the same absolutely specific shade of colour. But they would reject his analysis of this, namely that A and B contain instances of the same distributive unity. And we must remember that though Stout excludes likeness from his analysis he does believe that these instances are in fact exactly alike.

Moore has put the case against this analysis in its most serious form, namely that ' instance ' as used by Stout is meaningless.² And if he is right then the claim that characters are particulars is also meaningless. How would Stout answer this objection ? It is clear that he cannot point to any meaning of ' instance ' in actual usage. It is a question of whether he himself is attaching a meaning to it. I think he would appeal to inspection, and we might put his case like this : Consider two patches A and B that exactly resemble each other in colour. Then this (referring to the colour of A) is one instance, and that (referring to the colour of B) is another. But Moore points out that ' this ' does not name anything different from ' that ' ; and since Stout says that there are two instances he has not succeeded in giving a meaning to the word.

Now it is obviously true that ' this ' and ' that ' *if they only refer to the colour* do not name different entities, but there is a strong temptation to think that they do. And this requires explanation. I believe we are tempted in this way when we fail to distinguish between the colour and its place in visual space. When we look at the two visual patches, we are observing one

¹ I do not know how many of them, if any, would accept this formulation.

² In discussion.

colour in two places. But we may overlook the distinction between colour and place. We may think we are considering colour only, when in fact we are considering colour and place in conjunction. And since we are certainly looking at different places we are likely to think that we are looking at different colours. And then we want to say just what Stout says, that the colours are numerically diverse, but exactly alike. Thus I believe that failure to distinguish between colour and its place accounts for the desire to use 'instance' in the way that Stout wishes to use it.

In considering this distinction between colour and place we come upon two questions of importance, to which I should like to draw attention, though I do not intend to discuss them. One of these questions is, What do we mean by "numerical difference", when applied to particulars?, and this is of immediate relevance to the present problem. In ordinary language we speak both of two things and two colours. Thus there are two meanings of the phrase "numerically different from", one which applies to things and one which applies to characters. In the case of the two patches that exactly resemble each other in colour there is *ex hypothesi* only one colour in the ordinary sense. Stout, however, wants to introduce a third meaning of "numerical difference" which applies to instances, and is *analogous* to numerical difference between things—*analogous* because two instances may be exactly alike. But if particulars (sense-data and physical objects) are numerically different because they include different places—and I believe they are—then "different but exactly alike" derives its meaning through this inclusion of place, and it is pointless to speak of an *analogous* difference which applies to terms that do not include places. I believe, accordingly, that a mistake about the numerical difference of particulars underlies Stout's contention. His own view is that things are numerically different because they contain different instances—"there is no distinction of substances as separate particulars which does not involve a corresponding distinction of their characters as separate particulars".¹ Of course this cannot be right if 'instance' is meaningless.

The other important question, namely, Are there absolute places in visual space?, is closely connected with the first. In discussing whether particulars (sense-data and physical objects) include place in their definition or not, we shall want to consider the nature

¹ *Studies in Philosophy and Psychology*, p. 389. Stout gives two arguments to support this view (pp. 389-391), which Moore has examined and shown to be mistaken. *Are Characters Universal or Particular?*, pp. 105-112.

of places. And it is places in visual, *i.e.*, sensible, space that are concerned. I call attention to the question partly because of this connection, and partly because it gives sense to the more general question: Is the distinction between particulars and universals ultimate? ¹ In considering this point it is well to note that the words 'particular' and 'universal' have been used in a number of different ways, but within a certain range of variation. It would obviously be improper to apply them to distinctions outside this range. But if places in visual space are absolute it would be quite proper to use them for the distinction between absolute places and absolutely specific sense qualities, *i.e.*, to call the former particulars and the latter universals. And this distinction would be "ultimate" since both places in visual space and absolutely specific sense qualities are immediately given, or in other words, belong to the sense field. Accordingly, if we believe there are absolutely specific characters in the sense field, and ask whether there are also absolute places, we are asking whether the distinction between universals and particulars is ultimate.

And now let us turn to generic characters. Stout, as we have seen, rejects the view that 'red' and 'colour' stand for single positive qualities, but thinks that the philosophers who say that characters are universals accept it. But he is mistaken in this about some of them. In his contribution to the Symposium *Are Characteristics Universal or Particular?* Moore says: "I perceive with regard to R_1 , [a shade of red] that it has a certain character, P , which belongs also to the shade R_2 and to an immense number of other particular shades, and what I mean by 'is red', is simply 'has *some* character of the kind P '." ² The root of his disagreement with Stout lies in his view of absolutely specific characters, and clearly not in the belief, which he rejects, that generic characters are single and positive. Certainly he would not accept Stout's analysis of generic characters, among other reasons because it includes the word 'instance'; but that is quite another matter.

One would not, of course, accept Stout's analysis if one thought 'instance' was nonsensical. One can, however, easily substitute absolutely specific character for instance, and consider the analysis on this basis. But there are other difficulties in Stout's account.

² Mr. Ayer raises this question and concludes that, in its ordinary sense, it is not a "genuine question". On "Particulars and Universals", pp. 58-62, *Proceedings of the Aristotelian Society*, 1933-34. I should think the sense I suggest might be called an "ordinary sense", but, in any case, Mr. Ayer does not consider it.

¹ Supplementary Vol. 3 of Aristotelian Society, p. 101.

I am puzzled about his phrase "the distributive unity of a class is ultimate". It seems to me that he is using it in two senses, but does not distinguish between them. There is no doubt he is using it to say that membership in a class of characters is ultimate in the sense I considered when comparing a class of crocodiles with a class of instances. Just as membership in the former class depends on possessing the common property being a crocodile, so membership in the latter depends on being contained in the same ultimate unity. My belief that Stout is also using the phrase in another sense is based on his criticism of the nominalists. "But I differ from them essentially in maintaining that the distributive unity of a class of kind is an ultimate and unanalysable type of unity. The nominalists, on the contrary, say that it can be explained through the relation of resemblance. This view seems to me entirely indefensible. Distributive unity is signified by such words as 'all', 'every', 'any', 'some', and the indefinite article. Can the meaning of these words be stated adequately in terms of resemblance? This is plainly impossible." They have a meaning "that cannot be reduced to relations of similarity. It is precisely the concept of distributive unity that remains unexplained."¹ The point here is that "all" stands for something ultimate, and that the nominalists fail to recognise this ultimacy. I think that Stout is speaking of the difference between referring to a class by the use of 'all' and a descriptive phrase, *e.g.*, all instances that resemble each other, and by enumeration of its members. And he is saying that in the former case 'all' stands for something ultimate. And I want to suggest that this is a different point from what we considered above, namely, that membership in a class of instances depends on being contained in an ultimate unity. Stout may be right about the ultimacy of 'all' and right in believing that the nominalists neglect it. But to say that membership in a class depends on resemblance does not entail the denial of this ultimacy. In other words, if we agree with Stout that 'all' stands for something ultimate, it is still sensible to ask whether membership in a class of instances, or rather a class of absolutely specific shades, depends on an ultimate tie or depends on resemblance.

I do not feel at all inclined to accept Stout's view of an ultimate tie. He describes it, we may remember, as a complex which includes both instances and the resemblance between them, and compares it to a spatial complex which includes both *a* and *b* and the "relation of above and below subsisting between them".² I do not find this at all enlightening, and prefer to think of it as an

¹ *Studies in Philosophy and Psychology*, p. 387.

² *Op. cit.*, p. 388.

ultimate relation, but even so can see no reason for believing in it. We class different shades of red together because of their resemblance to each other.

There is a strong tendency among philosophers to agree with Stout up to a point, *i.e.*, to believe that in predicating a generic character we are making a relational statement, and I shall conclude by discussing this view.¹ It can, of course, take many forms, and different philosophers have suggested different relational statements. Some have supposed that in predicating a generic character we are asserting a direct relation between particulars. For example, in saying 'A is red' we are saying of some particular that A resembles it in being red, in other words that A has resemblance-in-being red to that particular. And 'A and B are red' = 'A and B resemble each other in being red', in other words 'A has resemblance-in-being red to B'. On this view 'A and B are red' is of the same type as 'A is near B', and the only difference between them lies in the relation, which in the one case is resemblance-in-being-red and in the other is nearness.

I believe that views of this type overlook the fact that in talking about generic characters we are talking about absolutely specific ones. This is a matter of inspection, and I cannot support it by argument. I should think most people would agree that when I say 'that's red' where 'that' refers to the colour, I am either saying 'That's a shade of red', or 'That is called red', and thus in each case talking about an absolutely specific shade. And in a similar way when I predicate red I am talking about an absolutely specific shade. Of course I do not mean that I am naming such a shade, nor am I talking about it in the sense in which I am talking about red. But an analysis of 'this is red' can only be correct if it starts with 'this has some character which. . . .'

I shall now consider two analyses which satisfy this condition. According to both we are asserting a relation between absolutely specific characters. For one we have to assume that there is a unique relation of resemblance between all shades of red, another between all shades of scarlet, another between all shades of green, and so on. We may call these respectively red-resemblance, scarlet-resemblance and green-resemblance. The suggestion is

¹ A more extreme statement would be that *every* qualitative fact consists in a relation between particulars. This is incompatible with the view I have taken about absolutely specific characters. I believe Mr. Ayer makes the more extreme statement. He allows "primary particulars" (sense-contents), but not primary universals. See his article on "Particulars and Universals" in *The Proceedings of the Aristotelian Society*, 1933-34, pp. 52; 56-57; 59.

that 'this is red' = 'this has some shade which has red-resemblance to other shades'. But the assumption of these unique relations is not satisfactory. It is obvious that two red sense-data resemble each other in a different way from two green sense-data, since the former resemble each other in being red, and the latter in being green. But it is arbitrary to assume that the shades of red resemble each other in a different way from the shades of green.

The other analysis does not involve this difficulty and has a great deal to recommend it. In his *Examination of McTaggart's Philosophy* Prof. Broad considers the view which I have rejected, that in predicating a quality of a particular we are asserting a direct relation between that particular and another. He does not accept this view, but wants to suggest a plausible analysis for anyone that does. If we are making a relational statement of this kind, he says, "it is not at all obvious that the relation would be that of *exact* likeness of a specific kind".¹ He then discusses how we learn to distinguish between certain groups of sensibilia. We learn to distinguish between different groups, each consisting of sensibilia which resemble each other "*fairly closely* in hue", whilst the sensibilia of any one group are wholly dissimilar in hue from those of any other. We are taught to give the name 'red' to all the members of one group and any other sensibilia which resemble them to a certain extent. He then suggests the following definition: "X is red = X resembles in hue any of the sensibilia which I was taught to call 'red' at least as closely as the least similar of these resembled each other."²

I do not agree with this analysis both because it asserts a direct relation between particulars, and because it assumes that in predicating red I am alluding to what I was taught to call 'red'. But it is very suggestive. If anyone were to ask me, what do you mean by 'red', I should point to a number of different shades and say: 'You see that these all resemble each other, some more and some less. I mean by 'red' any shade which resembles these at least as closely as the least similar of them resemble each other.' I suggest that 'This is red' = 'This has a shade which resembles these (where I point to a number of shades) at least as closely as the least similar of them resemble each other.'³

¹ *Examination of McTaggart's Philosophy*, Vol. 1. Cambridge University Press, 1933, p. 88.

² *Op. cit.*, p. 88.

³ Prof. Broad gives a very similar definition of "X is an N", where N is a composite character. *Op. cit.*, p. 113.

There are a good many points in favour of this definition. It is what we should say if asked to explain what we mean by 'red'. It is also a reply we are likely to give to anyone challenging our statement, *i.e.*, it is a method of verifying it. And it clearly does not assume anything that we are not quite certain of at the time of making the original statement. A less important point in its favour is its indicating the vagueness of 'red' by leaving the amount of resemblance vague. It is obvious that red requires less resemblance than scarlet, but we cannot in either case fix the degree. And borderline cases show us that people use these and other colour terms differently from each other.

But it is clear that the following objection will be raised. This analysis, it will be said, involves pointing to different shades of red. But usually when I predicate red I do not point to these shades, because I am neither observing nor imagining nor thinking of them. And a sentence cannot mean anything that I am neither observing nor imagining nor thinking of when I understand it.

Now is it true that a sentence cannot mean anything that I am neither observing nor imagining nor thinking of when I understand it? I suggest that it depends on what I mean by 'thinking of'. Obviously there is a sense of it in which understanding a sentence and thinking of its meaning are equivalent. But does the objection refer to this sense? Let us consider more closely what is meant by saying that we are not thinking of different shades of red. Suppose we see a pillar-box and say 'that's red'. It is probable that we are neither observing nor imagining any other shade of red at the time, and neither uttering nor visualising the *name* of any other shade. I believe the objection is using 'thinking of' in such a sense that I am only thinking of something when I am using some symbol for it.

It is true that I cannot understand a sentence without observing or imagining or thinking of what it means. But in this case 'thinking of what it means' simply means 'understanding it'. I suggest that we can understand a sentence without observing or imagining or using some symbol for everything which it means. And I believe this amounts to saying that we can understand a sentence without acquaintance with all the constituents of the proposition which it expresses. And if so an analysing sentence does not need to pass this test.

IV.—DISCUSSIONS.

VERIFIABILITY AND MEANING.

PROF. STACE's article in *MIND* for Oct., 1935, contains some criticism of an article by Mr. Ayer in *MIND* for July, 1934, and in order to make page-references to both these articles it will be convenient here to distinguish them as 'S' and 'A'.

There seem to be some other subtleties worth considering in addition to those noticed in 'S'. These begin to appear when we ask ourselves what purpose the inventors of the "principle of verifiability" may have meant it to serve. If, for example, we guess that they hoped by means of it to solve the problem of finding the common element in what we already know to be meaningful (S. 423), then we might be inclined to agree with Prof. Stace that the principle of verifiability fails to achieve that object.

But another guess is also possible. Perhaps they were in search of a principle with a different purpose, namely that of helping us to do justice to both parties in a dispute. We often find that actual disputers are a little uncertain about each other's really intended meaning; sometimes indeed one of them is a little uncertain about his own meaning. And this regrettable situation does seem to call for some outside help. What, we may ask, can logic tell us about it?

We might begin by remembering instances in which we ourselves have been led into error through a verbal ambiguity. In those cases we were surprised to find that we had been treating some question more simply and superficially than it deserved. We (or Jones) may have said, for instance, that in a certain war the country called X was the 'aggressor'. That is a term which from the dictionary point of view is quite free from ambiguity. The dictionary gives, for those who need the information, an accurate and simple *translation* of the word, a translation which might conceivably be of service to an inquisitive child. But from a man's point of view the statement that X was the aggressor is often full of ambiguities. And, by the way, even a child may have heard about a wolf and a lamb who differed about the proper application of the term.

So when Jones says that X was the aggressor, and we are in doubt whether to agree with him, we naturally want to know more exactly what his statement *means* to assert. We all agree that the word 'aggressor' means what the dictionary says it does. But that knowledge is not enough to show us whether we can accept Jones's statement as true. Does he perhaps mean only that X's Government

first ordered general mobilisation ? Or that X's army first crossed the frontier, or fired the first shot ? Or again perhaps that X's Dictator flatly refused to allow the League of Nations to arbitrate ? I have once heard it argued—by a 'pacifist'—that in 1914 the Belgians aggressed the Germans, who had merely asked leave to walk peacefully through their country.¹ Anyhow there is some reason for asking Jones which of such alternative meanings he has in view, since otherwise his statement fails to provide material for rational argument—either disputable assertions of fact which might be brought to a definite test, or disputable views about the proper application of the term. The audience, wishing to be fair, can neither accept nor reject the verbal statement till they are told which of its possible meanings was actually intended by Jones ; *i.e.*, what verifiable facts, or what further opinions, it was intended by him to *imply*. The logical doctrine involved is only that two or more alternative meanings, when both are left open, amount to the absence of any meaning at all.

On the other hand it is also possible that the inventors of the principle of verifiability were trying to solve a different problem, namely the one in which Prof. Stace is specially interested,—the search for a common element in all recognised cases of meaning (S. 423). Shall we then say that wherever there is recognised meaning there is *implication* ? Such an answer would, no doubt, involve a temporary disregard of the distinction between an assertion and its own 'corollaries', and we should then have to choose whether we are prepared to make this sacrifice. If we happen to hold the ordinary verbalistic view of the nature of distinctions we might even think the sacrifice wrong in principle, since the distinction does admittedly refer to a recognisable difference. We might fear that if an assertion is to be taken as the same thing as 'its' corollaries the view that one assertion can be inferred from *another* will become obscured.

This is an example of the difficulties that are liable to arise when the ambiguous word 'proposition' is used indifferently for sentence and assertion. Though it would be absurd to say that two different *assertions* are one and the same assertion, there is nothing absurd in saying that two different verbal *statements* may express the same assertion ; nor in saying that there may be any number of separate assertions possibly deducible from a single verbal statement. Such assertions would be separable when regarded either as different assertions conceivably intended by a given speaker, or as separable parts of a single whole assertion. The recognition of corollaries as different from their parent assertion would then be no more difficult than our familiar distinction between a whole and its parts.

Can we get any light on Prof. Stace's problem by means of his

¹ When someone mentioned the fact that the leave had not only been asked but refused, the answer given was that the refusal itself amounted to an aggressive attitude towards a friendly nation. There were some of us who thought this argument weak.

attack on the 'logical positivists'? As imagined by him they seem to be very unphilosophical people. According to 'S' they constantly make dogmatic assertions (419, 429, 436). Their doctrine implies (424) that all statements about the past are of necessity meaningless. And though they might hesitate (429) to declare definitely that the only possible kind of experience is sensuous, they have at least a bias towards that opinion, inclining them to assume that any statement asserting 'objective value' must also be meaningless.

Though I cannot claim to speak in the name of the logical positivists, I expect they are not quite fairly open to these charges. As far as dogmatism is concerned we may reflect that there are many different kinds or degrees of this tiresome attitude, from excommunication of opponents down to mere 'dogmatic slumber'. And though S. 419 does speak of these people as "not allowing their opponents to open their mouths at all" this probably means less than it literally says. We should, for instance, bear in mind an expression used in A. 341: "There may be some who find no flaw in our reasoning". This looks as if Mr. Ayer had also expected to meet with *some* reasoned opposition.

Often enough the charge of dogmatic slumber means only that those accused of it have failed to benefit by criticisms already open to their inspection. In the absence of any such reference in 'S' how can we judge whether this accusation is true? Dogmatic assertion, we must surely suppose, is a special kind of assertion and therefore somehow different from assertion pure and simple. This occasional quality of assertions cannot safely be inferred merely from the unconditional form of the sentence used in asserting. Otherwise most of the assertions made in science would be liable to the charge. Anyhow, as long as it is possible that the logical positivists, in saying that a given statement "has no meaning" are only intending to mention their own fallible opinion and to ask for criticism, ought we not to give them the benefit of the doubt? In modern times this undogmatic manner of making assertions is common enough, and it has the advantage of brevity in expression. It would be tiresome to add "in my humble opinion", or "please show me where I am wrong" every time we wanted to express a belief. I submit that the dogmatic quality of an assertion is best shown afterwards in the assessor's reception of actual criticism. The essential dogmatist fears and hates criticism when it is relevant.

In the second place, if the principle of verifiability, as intended by Mr. Ayer, must imply that all statements about the past are meaningless, how comes it that he has himself chosen as an example of a question *with* meaning the doubt (A. 339) whether a certain picture was painted by Goya? And would anyone say that statements about Brutus and Cæsar are necessarily devoid of meaning? Ancient history is often—though not always—more difficult to verify than asserted recent facts, but mere difficulty is not what the logical

positivists are speaking of. Mr. Ayer (340) quotes with approval Prof. Schlick's view that a statement may have a clear meaning in spite of any practical difficulties there happen to be in verifying it. Meaning, that is to say, depends (according to A) not on performing the verification but on knowing what sort of test the speaker intends as sufficient.

Another small point may also here be considered. Time is so fluid that no sharp distinction can be drawn between past and present—unless of course we can be content to make it depend on the tense used in the verbal statement. Facts always happen *before* they are noticed, and therefore before they can be asserted as facts. By the time we can say that it *is* raining the rain that we speak of has already fallen.

The third of the objections raised by Prof. Stace makes use of the notoriously difficult distinction between subjective and objective, and its intended application in this context is not fully explained. There seems to be a reference to Mr. Ayer's use of the word 'objectively' in paragraph 2 of A. 342, where however it is qualified by the convenient word 'somehow'. Mr. Ayer is here presumably referring to the difficulty of proving the truth of (some) judgments of value. When I 'feel in my bones' that one proposed course of action is, say, nobler than another, there is no simple way of explaining to Jones that my judgment is right. His bones may be differently constituted; and if so he remains unconvinced by anything I can say, and I remain in his opinion a crank.

All this may be admitted without concluding that the statement of my opinion is *meaningless*. It would perhaps be so to someone to whom the notion of better or worse conduct was wholly strange. But if we take into account this imaginary person why not equally take into account someone incapable of ordinary 'sensuous' experience? Unless we are talking of ordinary human beings we get into completely uncharted country where every kind of meaning disappears.

On the other hand there are some statements of value—for instance, in painting or music—that convey no recognisable meaning to a normal but inartistic person. This should remind us that meaning, like a quarrel, takes two to make it, and that if we conceive it as an 'entity' on its own account we are only playing tricks with language, to no purpose; tricks like the pretence that potential existence is one form of existence, or an imaginary illness one form of illness.

Returning now to the general question about verifiability and meaning, some help may be given by recognising that 'the' meaning of a word—*i.e.*, the generally accepted meaning in most contexts in which the word is used—does not stand in need of any "Principle of Verifiability". Its reference is to general custom, either as known to both parties or (when unknown to one or both of them) as stated in the dictionary. This kind of meaning, though subject to some elasticity and vagueness, is one that language could never do without.

It forms a basis from which we can proceed to closer specification when required. We may for convenience call it 'Dictionary meaning'. It is essentially the translation of one word into others better known.

Contrasted with this is the kind of meaning referred to at the beginning of this paper; the choice made by a would-be assertor between two or more possible meanings in order to remove an ambiguity which has been found in his statement by its would-be interpreters and which renders it *entirely* meaningless to them so long as the ambiguity is not removed. We might call this the "Speaker's meaning", and if a Principle of Verifiability is ever to be of service it is here.

The distinction between these two kinds of meaning will often be found useful. It would leave our intuitions of value never devoid of dictionary meaning, though they may lack speaker's meaning in particular cases. And the same with metaphysical statements—if we are careful not to beg the question by declaring that total absence of meaning is what distinguishes 'metaphysical' questions from others. To condemn a whole class of questions in advance of enquiring what their (speaker's) meaning is supposed to be may be a waste of our opportunities of learning something new to us.

For some unexplained reason the distinction between dictionary and speaker's meaning has often been wrongly taken as implying that any speaker is free to use words at random, ignoring all dictionary meanings. But what temptations are there for anyone to play such tricks? Possibly there are occasions when Jones may *wish* to use words so as to be misinterpreted, but no one admires him for doing so, and a quibbler is soon found out. It is difficult enough to avoid being misinterpreted when we keep as near as we can to the customary usage. What is here called Speaker's meaning is the dictionary meaning *with further specification added*. The distinction is more like that between a pound and a shilling, than between money and something of no value. But it is still better conceived, not as contrasting a larger with a smaller value, but as contrasting two different *purposes* for which an enquiry into the meaning of a word may be made. At one time we may want to know 'the' meaning of (*e.g.*) some technical term, while at another time our purpose may be that of pinning a speaker down to one of several possible meanings. Nothing is gained by confusing these two different reasons for the enquiry into a meaning. The objects of the search itself are different, and the same answer will not serve for both.

The 'concept' as imagined by Prof. Stace seems to be a robust kind of entity, with a structure and a content of its own, independently of any judgment from which it has been abstracted. Judgments, according to this familiar view, are constructed out of ready-made concepts, instead of being the material within which concepts are to be found. But if we take any particular concept and ask what 'its' meaning is, we find that the question can only refer to dictionary

meanings since speaker's meaning does not begin till someone has formed a judgment and embodied it in a statement professing to have this quality. The question then raised is not as to 'the' meaning of the abstracted concept X, but as to the meaning intended by the word X in this particular context. By the adoption of our proposed distinction we may perhaps conclude that the principle of verifiability has no function to perform in regard to questions about 'the' meaning of the concept X considered as an entity, but only when that concept is the vulnerable part of a statement discovered to be ambiguous.

ALFRED SIDGWICK.

A FACTOR IN HYPNAGOGIC IMAGES.

VARIOUS philosophers and psychologists have expressed the opinion that at least some dream visions owe their origin to objective stimuli arising within the eyes. The possible sources of such stimuli are the structures which cause entoptic phenomena and, it has also been suggested, the pressure of the closed eyelids acting upon the retinal elements through the ocular media. There is no evidence to support the last supposition. Greater pressure than is produced by simple closure of the eyelids is necessary to induce those visual perceptions that we term pressure phosphenes. Nor is there any evidence to support the view that the commonly recognised entoptic phenomena cause dream visions. According to Helmholtz entoptic phenomena may be due to malformations of the iris, secretion of tears or lid-glands, deformation of the cornea by pressure, imperfections of the crystalline lens, or motile forms in the vitreous. None of these could produce an image with the eyelids closed even during full consciousness. Besides these phenomena there are others induced by the retinal circulation which belong to this group. Luminous points may be seen by looking, with a feeling of relaxed accommodation, at a blue or grey sky or a uniform white surface—most easily by gazing at the reflected light from a mercury vapour lamp—circulating over the field of vision. The more powerful, within limits, the light, the more numerous the moving points appear. They are not seen in dim illumination and consequently not when the eyelids are closed. The retinal vessels may also be perceived by throwing parallel light rays on to the retina and keeping the light source, relative to the retina, in motion. If the movement is stopped perception of the blood vessels ceases. Neither of these, nor a few less important entoptic phenomena, can in any sense be effective stimuli to any part of the cerebrum during sleep. Indeed the perception of any entoptic phenomenon due to structures in front of the layer of rods and cones requires a greater intensity of light than is possible with the eyelids closed even during a state of alertness. Some perception of light and form may, however, occur when the eyelids are closed and it is necessary to inquire what this perception is. An excerpt from Bergson may introduce the inquiry. "Close the eyes and see what occurs. Many persons will say that nothing happens; they do not look attentively. In reality one sees many things. At first a black background. Then spots of diverse colour, sometimes dull, sometimes of singular brightness. These spots dilate and

contract, change their form and tint, encroach on one another. The change may be slow and gradual. Sometimes it is accomplished with extreme rapidity. Whence comes this phantasmagory? Physiologists and psychologists have spoken of 'luminous dust', of 'ocular spectres', of 'phosphenes'; on the other hand these appearances are attributed to slight modifications which are produced without ceasing in the retinal circulation, or indeed by the pressure which the closed eyelids exert on the ocular bulb exciting the optic nerve. But the explanation of the phenomenon and the name given to it is not important. It is universally met with and it furnishes, without any doubt, the material from which we carve out many of our dreams." The explanation of the phenomenon, if not important in Bergson's sense, is surely of interest. It cannot be due to the conditions which he attributes to physiologists and psychologists because, apart from phosphenes and the retinal circulation which have been dealt with above, they do not exist as objective entities. Before considering an explanation, a quotation from the late William Archer's book *On Dreams* (p. 40) will help to clarify the situation and serve as a text. The experience happened on a steamer. "To-night I caught dream scenery in the act of evolving from the spots and patterns that one always seems to see under the closed eyelids. I was lying in my deck chair after dinner, but it was quite early—not more than eight o'clock. Perhaps the eyelid patterns were particularly vivid because of the fact that I was facing towards a broad band of brilliant moonlight on the sea. I was perfectly awake, fully conscious of my personality and my surroundings; but I gradually became aware that I seemed to be contemplating an Eastern scene—an army of men in turbans moving against the light of a dim sky. It was vague—no individual figures or detail stood out distinctly—yet it was quite pictorial, and had even a certain beauty, or so I thought. That it was built up out of the eyelid patterns, I am quite sure. The moment that I became fully conscious of it as an illusion it passed back into the shifting shimmer, so to speak, that wavers before the closed eyes". Other experiences were architectural in form. They involve other features but, like many hypnagogic images, they are similar to some of the perceptions which occur in mescal intoxication, the explanation of which I am dealing with elsewhere. It is unquestionably the same in both cases. Archer's explanation that his images were built up from his eyelid patterns is quite untenable. I can well understand the misconception. My first experience of a similar kind was during an experiment with mescaline. I, too, saw large movements and circulatory phenomena, and concluded in my slightly intoxicated state that they were due to the circulation in the eyelids. Further investigation proved that they were not; nor could they be. The position of the eyelids relative to the refractive media of the eye makes it impossible for any distinct image of the structure of the eyelid to be seen. A red colour, if the light is sufficiently intense, is perceived, but no distinct structural form. The form which

Bergson and Archer and many others have described has a different origin.

The unravelling of the enigma of these conscious hypnagogic experiences was initiated by some experiments with mescaline. The visions produced by this substance were unlike those I had experienced with other drugs, and in consequence the entoptic phenomena in my own eyes were investigated. The results have been described.¹ It was found that the layer of rods and cones could, under certain conditions of lighting similar to those which, with closed eyelids, induce hypnagogic and mescal visions, look backwards and that certain retro-retinal structures, more particularly the chorio-capillary circulation which is immediately behind the retina, could in some measure be observed. This circulation is one in small sinuses, and is quite different in appearance from the retinal or indeed other normal capillary type. In my experiments it has seemed to be best resolved and consequently best seen in the light of the empty field of the microscope; and then, when the requisite dark-ground effect has developed, it has seemed a surging circulation with some resemblance to the form of a sheaf of fern fronds rustled by the wind. But various out-of-focus effects may ordinarily be perceived which may extend from dim marbled forms showing scarcely perceptible movements to indefinite whirling nebulae and beautiful arabesques. In perception the images often seem to be projected on to some plane in front. From a study of these movements under varying conditions I have come to the conclusion that all circulatory or whirling or sinuous movement perceived with closed eyelids is due to the chorio-capillary circulation. No other structure in the eye can produce such movements. They have been attributed without any substantial evidence to so-called bio-luminescent fluids or to electrons emitted, probably by the visual purple. While it is conceivable that such an emission of electrons might produce a perception of light it is quite inconceivable that they could give rise to the pictures of form such as are experienced in hypnagogic states. Zehender,² who previously perceived retro-retinal structures, thought that they might possibly have some connection with visual dreams and hallucinations. I have no doubt that they cause the hypnagogic images referred to in this paper, but whether they are causative in dream states not arising in a hypnagogic or semiconscious condition is questionable. It is difficult to believe that the energy of the choroidal circulation is sufficient to affect the percipient cells in sleep; but with this question I do not feel competent to deal.

It is not claimed that retro-retinal stimuli produce all the images experienced in a hypnagogic state—some of these are the result of previous images and some are pure phantasies; but it is claimed that retro-retinal structures are the only ones perceptible with closed eyelids and—after-images being excluded as being secondarily

¹ C. R. Marshall, *Brit. Journ. Ophthalm.*, XIX., p. 177, April, 1935.

² W. von Zehender, *Klin. Monatbl. f. Augenheilk.*, XXXIII., p. 392.

induced—that they are the chief factor in initiating concepts of images associated with turbulent or sinuous movement in its many forms, whether occurring in mescalism or in a hypnagogic state. Experiences in the two conditions may be very similar—some of Archer's descriptions in the chapter on "Visions and Dreams" might well have been written by a subject in a state of mild mescal intoxication—because the primary cause of the images in the two cases is the same; and like the starry and bejewelled scenes observed in mescalism, spots of light or their relatives seen in hypnagogic images have also a retro-retinal origin. It may seem surprising that the varied visual experiences of mescalism and the hypnagogic state should all arise from such a limited source, but the chorio-capillary circulation is not a uniform stimulus. It is often a surging movement; it varies in rapidity, and it is said in direction; and the effect of such movement, viewed as it always is indistinctly, upon a brain prepared for phantasies, is not difficult to conjecture. Apparitions and spectres are conceived, even by normal healthy people, in the dark from less cause.

C. R. MARSHALL.

Tunbridge Wells.

V.—CRITICAL NOTICES.

The Ethics of Power or The Problem of Evil. By PHILIP LEON.
London: George Allen & Unwin, 1935. Pp. 315. 10s. 6d.

THIS book is interesting and attractive, not only as the work of a young philosopher who has proved his competence in articles in this Journal and elsewhere, but because its author sets himself, with frankness and originality, to proclaim a gospel for the present age. He comes forward avowedly as a preacher, believing that all moral philosophy is preaching, and that all preaching is in some measure moral philosophy. The 'gentlemen's agreement' among philosophers to refrain from moralising can only be observed in appearance. If, as usually happens, they repel the impeachment, they are self-deceived. Mr. Leon's gospel is one both of salvation and of damnation; primarily, as the alternative title indicates, of damnation. A theory of Ethics, he holds, should start from the problem of evil as τὸ γνώριμον ἡμῶν, evil being "much more familiar, because it is much more in evidence, than goodness." Now the source of all evil is Egotism, that form of self-love which is directed towards winning position or, more concretely, power, for self. The author's main theme is the contrast between Egotism thus understood and Morality or the pursuit of objective and impersonal goodness. "At one pole there is sanctity or sanity or the genuinely moral life; at the other, insanity, the triumphant extreme of egotism—of pride, conceit, ambition, the lust for power. Between the two lie many different limbos of methodical madnesses or insane sanities, which are all the civilisations and all the savageries which have ever been" (19). The bulk of the book is devoted to the excavation of these limbos, and the unmasking of the multiform disguises in which Egotism, most frequently with complete unconsciousness on the part of the victim, manifests its baneful energy in human life. What a man says is so different from what he thinks, and what he thinks he thinks, from what he is really thinking. Mr. Leon draws freely for illustration upon history, psychology—e.g., Adler,—and the literature, especially, of our own time. Like all good preachers, he makes his hearers feel uncomfortable, convicting all and sundry of the sin of Egotism, while at the same time he disarms criticism by his freedom from complacency and the frank admission that he is scourging the vices in himself. "*De me fabula*", he writes (20), "a treatise on Ethics, like a novel, play or poem, is, of course, inevitably a personal exposure. Its victim can only hope that it

will also prove a personal catharsis, which, like that of tragedy, may help to cure others besides himself."

But Mr. Leon is no mere rhetorician, and the influence of his philosophical thinking, though often implicit, is felt in the background at every point. His position is fundamentally Platonic. With metaphysical systems that claim to know the universe as a whole, he has no patience; the universe is not a whole, and the attempts to treat it as such are sheer mythology. Absolutism is the arch-enemy, in which the insanity of Egotism has its hidden source. Though he maintains, rightly, that cognitive, conative and affective processes are integrated in all conscious life, and, more hesitatingly and more questionably, with Descartes and Croce, that error is due to evil will, he steers clear of any irresponsible Pragmatism. If metaphysics be understood, as in Plato's dialectic, to mean insight into the Form of Good, it furnishes the key to all knowledge and all morality (21). Morality lies in the desire, not for any process or experience of the self, but for the achievement of right situations, *i.e.*, situations that embody objective goodness. We shall return to this point presently. From morality Mr. Leon sharply distinguishes, on the one hand, the life of biological appetite, τὸ ἐπιθυμητικόν of the *Republic*, and, on the other hand, the life of Egotism. The former of these, as directed upon processes of satisfaction of natural impulses, is called by Mr. Leon the Egoistic life, both in its narrower form of selfish pursuit of one's own interests, and in the wider forms of alter-egoism (so-called altruism, which is really *égoïsme à deux, à trois*, etc.) and of tribal or national egoism, which seeks the gratification of the 'collective self' or 'actual general will' (Chapter II.). Such social egoism, which covers the secular humanitarianism that bewitched the ideologues of the eighteenth and nineteenth centuries, is a special object of Mr. Leon's denunciatory scorn, differing *toto caelo* from the sociality of morals, in which love of mankind draws inspiration from love of an objective and transcendent Good. Mr. Leon follows M. Bergson in the distinction of 'static' morality (*sic*), whose horizon is bounded by *la société close*, from the 'open' and 'dynamic' (the only genuine) morality begotten of faith in the *Civitas Dei*. All Naturalist and Utilitarian (Hedonistic or Ideal) theories of morals, including the ethics of Aristotle, are reflective expressions of Egoism. Mr. Leon holds, with Butler if not with Plato, that all the natural appetites, though self-oriented, are in themselves innocent, the occasion rather than the causes of moral evil. We note in passing that he appears (221) to misinterpret Plato as referring evil to the body as its source, ignoring the references, in the *Laws*, to evil soul as the cause of irregular motions and, in the *Timæus*, to the "receptacle" (χώρα *vice* matter) which lends itself readily to persuasion by reason. For Mr. Leon, the source of evil lies in self-love of another order, in the Egotism that aims at power, not in order to satisfy natural desires, which serve only as means for its gratification, but absolutely, as an

end in itself. To take Mr. Leon's favourite instances, Tito Melema in *Romola* exemplifies the egoistic or strictly selfish life, while Meredith's Sir Willoughby is an Egotist and not an Egoist. "The egoist . . . loves himself determined as this or that experience or process. . . . The egotist, on the other hand, loves neither Goodness nor himself determined as, or identified with, this or that experience or process. What then does he love? He loves just himself: not his eating or drinking or thinking or artistic activity. . . . He loves his bare undetermined self, his nothingness. This self, he will have it, is the Absolute or All" (93-94). What Plato calls τὸ θυμοειδές is thus interpreted, not as the natural ally of reason, but as the principle of evil for evil's sake; and is extended to cover not merely the timocratic life, but the tyrannical and many other types as well, its all-pervasive energy being tracked out where it is least suspected, e.g., in all virtues and rules of conduct, in all idols and ideals, in short in the whole scheme of popular morality. In its pure and perfect form, the mythical 'Uranian' Egotist is he who "is aware only of himself, and of himself as being exclusively and inclusively all reality or being or existence—the All or the Absolute" (*ib.*). And since all determination is limitation, he is too proud to be anything determinate, exemplifying "indeterminate potentiality solidified or petrified into absolute obstruction, resistance, opposition, negation". This inner self-contradiction, 'the Absolutist lie', is manifested in varying degrees in the actual earthly Egotism, which borrows content from the alien sources of egoism and also of morality, on whose deposit it draws, perverting it for its own end. The goal of such a life is insanity, alike for the individual and for the State. Bishop Butler was once discovered in his garden, wondering whether nations might not go mad as well as individuals. In his closing pages (303 ff.), Mr. Leon finds in Nazi Germany obvious confirmation of this theory of national ὕβρις.

We have endeavoured to state Mr. Leon's central contention in a manner congenial to his own. Readers of MIND will, however, look for comment on its more philosophical implications, and we select three ethical points for critical remark.

(1) He seems to us to confuse morality with religion, to the detriment alike of religion and of morality. That pride is the original root of evil is, of course, no new doctrine, but, as Mr. Leon well knows, one vital to the Judaic-Christian, as distinct from the Hellenic, tradition. The gulf between secular and theo-centric humanism harks back to the same ancestry. Mr. Leon likes to quote Augustine to his purpose—his interpretation (240-241) of the pear-tree incident in the *Confessions*, for instance, is admirable;—it was Augustine who in the *Civitas Dei* based his theodicy of history on the conflict between the *Civitas terrena* = man's earthly life as inspired by self-love, and the City of God = man's life, both earthly and celestial, as inspired by the love of God. Conversion, again, is declared to be essential to entry upon the

path of morality; as in Plato's allegory of the Cave, the soul must suffer a revolution from darkness to light, and no process of 'sublimation', whether of egoism or of egotism, can avail as a substitute for regeneration (244-246). Surely these views, so admirably stated by Mr. Leon, are religious rather than ethical, though he deliberately, so it appears, refuses to acknowledge the distinction. It is not a mere affair of terminology. It means that religion suffers violence, as when the emotional act of worship is relegated to the domain of egotism and of sin: "Laudatory and culpatory attitudes cannot deal with, or be inspired by, real goodness" (103). Under the head of laudatory attitudes come "worshipping, venerating or reverencing, approving, respecting, praising, honouring, valuing, esteeming, prizing, admiring" (97). But what of the worship and praise of God? Would Mr. Leon interpret egotistically the last clauses of the Lord's Prayer? Doubtless Sir Willoughby Patterne repeated them weekly in Patterne church, but he could hardly be supposed to have grasped their meaning. Place too, *pace* Mr. Leon, must be found in the religious and moral life for culpatory as well as laudatory attitudes, for righteous anger and the fear of God. There is an old jest on the coincidence that the marriage service in the Anglican Prayer-book opens with the words 'dearly beloved' and closes with 'amazement'. In religious experience, the case is rather the reverse. The fear of the Lord is the beginning of wisdom; only at long last does the way of the spirit lead to love. Mr. Leon is apt to take liberties with love, as the sole motive of what he calls morality. To avoid sentimentality in this matter, it is well to have recourse to Dante, who knew, if ever poet knew, love's essential quality. For Dante, love is awe-inspiring, and even terrible, whether in its earthly or in its Uranian manifestations. And the literature of religion, to which Mr. Leon has devoted not a little attention, will be found on further study to teach the same doctrine.

(2) Morality also suffers violence by the exclusion of all values, all duties, all ideals from its purview. Mr. Leon, of course, has his reasons; in that these are generic and not individualised, quantitative and not qualitative, modes of absolutising what is merely relative. "They have to do only with what is generic and allows of measurement, comparison, grading and ranking—at the best with virtues and general rules derived from, but not identical with, morality" (103). "Wherever there are grading and comparison, and, with them, prizing and valuing, power is in effect always the object" (199). "Wherever there is an ideal or rule of life, the life is egoistic, if it is not egotistic. Only for the objective life seeking to express Goodness in rightness can there be no ideal or rule of life" (80). Are we not here on the brink of anti-nomianism? It may be granted that the term 'value' is much abused in current ethical discussions, and that there is a good deal to be said for limiting its uses, with Mr. Leon, to value in

exchange. Taken thus, we can agree that all values are measurable and graded, and that between them and infinite Goodness there is a great gulf fixed. But even so a clear distinction should be drawn between values, ideals, virtues and duties 'inspired by real goodness' (103), or, in Kantian phrase, by consciousness of law universal, though these are admittedly imperfect applications, and values, ideals, virtues and duties as idols erected in the guise of absolutes by Pharisaism or egotistic pedantry. The difference does not lie in generality or comparability, but in the animating motive. Day by day and all day long finite goods are prized, finite duties done, finite ends pursued as ideals, by men who walk humbly with their God, without thought, conscious or unconscious, of egotism or position for self. There are passages in Mr. Leon's book where he seems to allow for this; but they are inconsistent both with the extracts above quoted, and with the general tenor of his argument. In his zeal to convict the world of egotism, he is too apt to slide into overhasty generalisations. Were his statements to be taken unreservedly, morality would cease to be a matter for practical application, and remain a pattern in heaven, reserved exclusively for theoretic vision.

(3) That such is not Mr. Leon's intention is clear from his tenth chapter, entitled *Rightness and Goodness*. He confesses that his remarks on this much-debated issue are but incidental to his main theme, and necessarily inadequate. All moral thinking, he says, is practical; a right thought is a right act, a wrong thought a wrong act (255). Yet "a moral desire . . . is not primarily a desire for any doing (process) whatsoever" (78). "The genuinely moral man is not concerned even with the question whether *he* is moral or good or objective, whether *he* is non-egotistic or saved, whether *he* is doing right, but only with the question whether right is being done" (195). For rightness "is always in respect of a whole individual situation completed in a certain way", not a character of action or of any process or experience; though processes and experiences are involved, since "a situation is constituted by persons, their attitudes to one another, and the processes of their respective activities and passivities (thoughts, emotions, deeds)" (50). In the event, the rightness of a whole situation lies in its embodiment or expression of Goodness or the Good (52). The genuinely moral desire is the desire that Goodness be embodied in the situation (296). Several important questions arise here, on which more light is called for than is thrown upon them in this book. What, for instance, is the timeless, transcendent, sovereign Goodness to which morality is wholly directed? We are told that it is the 'concrete universal', i.e., the universal which is also individual; but this does not carry us far. Rather it suggests the reintroduction of Mr. Leon's bugbear, the Absolute. What we want to know, of course, is whether ultimate Goodness, in its concrete reality, is or is not identifiable with God. Then, the term 'rightness' gives

rise to distressing ambiguity. The 'rightness' in question is obviously not mere efficiency (Croce's 'economic value'), for that is egotistic, not moral. But is not all moral rightness rightness for an individual agent? When we ask, 'right for whom?' Mr. Leon seems to answer 'impersonally right', though the situation *may* demand for its rightness a doing on my part or on the part of some one else. Is it not better to discard the abstract word 'rightness' altogether, as suggestive of an objective quality, and keep to what is 'right for me' or, better still, to speak solely of what I or another person 'ought to do'? Mr. Leon's handling of 'ought' raises a further difficulty. The 'ought', we are told, is ultimate (31): to ask the question 'Why should I do what I ought to do?' is illegitimate. Quite so; but we read later on that 'rightness' (does this mean the 'ought'?) depends on Goodness, and that the 'ought' is mediate and indirect. "When I say: 'I ought to do this', I do acknowledge that I desire the action though only mediately through desiring the completed situation" (282). Mr. Leon's statements on this matter are not very easy to follow, but he obviously regards the 'ought' as somehow dependent upon the Good. In the end, he declares openly for the *Seinsollen*. What is good always 'ought to be'. "Only Goodness," he says (285) "is really good, or in itself and always good, or good without qualification, or is that which ought always to be." The individual situation, likewise, together with its individualised elements, is derivatively good and therefore "is that which ought always to be" (*ib.*). Here we can only assert our disagreement. In its moral usage, "ought" means always "ought to do". Not 'this is right' or even 'this ought to be done' is the correct form of statement, but "I (or X) ought to do (or to have done) this". It is significant that Mr. Michael Oakeshott, in *Experience and its Modes*, is only able to defend the *Seinsollen* by the damaging admission that, in contradiction from the 'ought to do', it is bereft of any thought of obligatoriness. But, if this be so, what entitles it to be spoken of as an 'ought'?

These criticisms must not be taken as impairing the value of Mr. Leon's exposition of his main thesis. The life that aims at power has received too little attention from modern writers on Ethics, and we are sincerely grateful to Mr. Leon for thus placing it in the limelight, and for his insight and originality in handling the problems that it evokes. As evidence of this we note his penetrating remarks on the close integration of motive and action (26), on remorse and repentance (152, 204), on the baneful prevalence of maternal possessiveness (63-65), and on class-consciousness and the gospel of Dialectical Materialism (143-144, 238-239). Much, too, might be said on his reconciliation of the apparent positivity of evil with the truth of the historic doctrine that evil can only be willed *sub ratione boni* (34 ff., 241 ff.). It is not evil as such that a man loves, but himself. The Egotist, whose character ap-

proaches most nearly to contrariety with morality, can only say, "Good, be thou my evil"; he cannot say "Evil, be thou my good". Even the devil, in Tauler's words, "hateth sin naturally" (37). If at times Mr. Leon carries reaction against dominant habits of thought and action to the extreme of paradox, this is because his interest lies not merely in philosophy but in the conversion of men's souls. Plato, too, shared this double interest, and was led by his zeal for practical reform to exaggerate the besetting evils of his generation. We cannot judge Mr. Leon too severely for deviating in the steps of so great a thinker.

Note.—In addition to two misprints communicated by the author, viz.: 84 (title), for *Egoism read Egotism*, 185 (9 lines from foot) for *arch-egoist read arch-egotist*; we note two others, viz.: 168 (first line of § III.) for *appetition read ambition*, and 237 (four lines from foot) for *stuggle read struggle*. The book has an excellent Index.

W. G. DE BURGH.

The State in Theory and Practice. By HAROLD J. LASKI. London: George Allen & Unwin, Ltd., 1935. Pp. 336. 7s. 6d.

THIS is a book of the greatest interest and importance. It is a presentation of the point of view of that group of moderate Marxists, important for their ability if not for their numbers, who are attempting at the present time to maintain the essentials of Marx's analysis while avoiding the extravagances and rigidities of the orthodox school. We are not likely to get a better presentation of this point of view than the present volume. It shows the wide learning and the acute powers of reasoning that we expect from Professor Laski. It shows, also, a resolute determination to be fair and objective and, combined with this, an undercurrent of earnest feeling which make it impressive reading. And it is written in a style which excites the interest and holds the attention throughout. The points in the general manner of presentation which are open to criticism arise, I should guess, from an anxiety to finish it by a specified time. There are occasional signs of haste in the phrasing and, rather more frequently, in the proof-reading. What is more serious is that from time to time, as it seems to me, Professor Laski makes a statement, and then at a later stage, when a point occurs to him which would suggest a correction or qualification of this, he puts it down without going back and modifying the original statement. He thus at times gives the appearance of contradicting himself. I think it is an appearance only, because the two statements could generally be resolved into a higher unity as two sides of the truth. But I think

this would have been better done by the author than left to the reader.

The first chapter is called "The Philosophic Conception of the State" and in it Prof. Laski develops his general theory, largely by a criticism of the idealist writers. I must attempt a summary of the conclusions of this chapter, though no summary can do justice to a lengthy and detailed argument.

The formal description of the State is that it possesses sovereignty and exercises coercive power. But from this formal statement we cannot draw any practical conclusion about what ought to be the case, about the right of the State to exercise power and the obligation of its subjects to obey, and least of all about how the State ought to exercise this authority. There are great difficulties in the way of arriving at objectively valid conclusions about such points, because views of what ought to be are so largely conditioned and biassed by the situation and circumstances of each individual. But there is an inescapable necessity for us to attempt this task. We must aim at a science of justice or of natural law, which will give us an objective standard of moral judgements, as a necessary postulate of our political thinking.

We must recognise the difficulties that arise from the fact of the variety of opinion, though this variety is often exaggerated. But we must admit that in the last resort each individual must take the responsibility for himself of deciding what he believes to be right and acting accordingly. Professor Laski illustrates and emphasises this point by a full discussion of the right of resistance to the commands of the State.

From this point of view we see that the claims of the State to obedience rest upon the purposes that it fulfils. And these purposes "may be summarised by saying that the end of the State is the satisfaction, at the highest possible level, of its subjects' demands". It is implied in this that the needs or demands of all the subjects or members of the State must be regarded as of equal validity. If the State's power is controlled by and in the interests of any limited group which treats other groups merely as means to the satisfaction of its own needs, then these other groups have no obligation to obey, nor will they be likely to obey for long, once they have come to realise the situation.

With the general line of argument of most of this chapter I find little grounds for quarrelling. I should welcome particularly Prof. Laski's plea for the need for a science of justice or natural law, and, in connection with this, his very judicious remarks on the degree and significance of the variety of moral judgements. Some of the detailed discussions also, which do not appear in the above summary, seem to me particularly good, such as the very clear analysis of the relation between the State and the Government. I am not sure that Prof. Laski is quite fair to the Idealists, particularly Bosanquet. But, then, hardly anyone is nowadays. And, I suppose, in a com-

paratively brief discussion such as this it would not be easy to do justice to the warnings and qualifications with which Bosanquet himself tried to guard against a too rigid and mechanical application of his fundamental principles.

There are two further criticisms which I can only indicate briefly here. I find the exposition rather indecisive in its conclusions about the relation between force and consent in the establishment of sovereignty. I think, though there appears to me a certain inconsistency between different passages, that Prof. Laski is inclined to exaggerate the importance of the former. One consequence of this is the exaggeration of the difference between the State and other authorities. But a more important consequence seems to me an over-emphasis on the exercise of coercive power as a function of the State. In the first account it is described, rightly as I should say, as a last resort which the State must have at its disposal to meet emergencies. But in many subsequent passages it is described as the "central fact" or the fundamental or essential feature of the State. This seems to me an entirely illegitimate transition. If we were describing the position of the headmaster of a secondary school we should not say that the fundamental fact about it was that he was the person who was authorised to inflict corporal punishment, though his authority to do this in the last resort was one of the marks of his position.

The other point is that I do not feel content with the description of the purpose of the State as merely to satisfy its subjects' demands, without any attempt to evaluate or discriminate between these demands. It seems to me that if we are serious at all in a belief in the possibility of moral judgements we are bound to recognise that not all demands or desires are equally worthy of satisfaction. I fully recognise that this notion is capable of disastrous exaggeration to a point at which those in authority might deny any obligation to think of what their subjects wanted at all, as long as they were giving them what they thought was good for them. But the fact that a principle may be exaggerated or misapplied is no justification for ignoring it altogether, as Prof. Laski himself would have to admit when he is defending the right of resistance to the sovereign power as a last resort. I should add, however, that even if this point is admitted it does not seriously affect the rest of Prof. Laski's argument. And, of course, it throws no kind of doubt on the fundamental claim to equality of rights as between one individual and another.

So far, however, we have only a very general statement of principle. For a proper understanding of its meaning and applications it requires to be filled out by an examination of its actual working, both at the present time and in past history. This is attempted in the second chapter, "State and Government in the Real World", which contains the real core of the argument.

In this it is argued that this ideal of equal consideration of the

needs of all is never in fact attained. The use of power in the State is always being biassed in the interests of a particular group or groups. The bias is not necessarily conscious or deliberate : those in power may honestly believe that they are seeking the good of the whole. But their view of what this good is will necessarily be determined by the prejudices due to their particular position. As a consequence of this the duty of obedience is constantly being repudiated by those groups who consider that the bias is against them. This is a regular occurrence in history, and the key to it is to be found in the economic structure of society.

The argument for this is, briefly, as follows. "The basic factor in any given society is the way in which it earns its living : all social relations are built upon provision for those primary material appetites without satisfying which life cannot continue." The organisation of society which secures this must be kept going, and a coercive power is needed to secure this. That is the State, whose "primary function is to ensure the peaceful process of production in society. To do so it protects the system of productive relations which that process necessitates." There is therefore always and necessarily a strong bias in the authorities of the State in favour of the existing organisation of society. And that means that the State power will always tend to be used to protect the position of those who exercise economic power. Conversely, in a society with class divisions, those who do not possess economic power will always be potential revolutionaries. "The basic struggles are always struggles between economic classes to secure control of the sovereign power." They can be postponed so long as the system in force is expanding and increasing the total amount of wealth. When it ceases to do that, then the class struggle operates. It is always likely to be a real struggle. Even in a democratic State, though it is our duty to try to use democratic methods (though "this is a counsel of prudent expediency rather than of ultimate moral right"), the chances are that they will not be successful. For the lesson of history is that a class in power will not abdicate peacefully, and will use its power to destroy democratic institutions rather than submit. The whole argument is illustrated throughout by copious illustrations from past and present ; particular attention is paid to the phenomenon of Fascism from this point of view.

The discussion of the general thesis of this chapter, which is the general thesis of the whole book, would be more fittingly postponed to the end. But I must say a word about Prof. Laski's use of illustrations and examples on which his argument so largely depends. I find myself very rarely able to accept his account of particular cases precisely as it stands, and equally rarely able to meet it with a direct contradiction. It is much more often a matter of what seems to me a little exaggeration or over-emphasis in one direction or another. Yet the sum of a number of small differences comes in the end to a wide divergence of opinion. Further there seems to me

a certain lack of discrimination with regard to the times and places from which examples are chosen. It is significant that something, of the kind that Prof. Laski dislikes occurs in one country or at one time. But it is equally significant that it does not occur in another, and Prof. Laski's method tends to obscure this significance. Finally, there seems a certain tendency at times to read a sinister meaning into events on very small grounds. For instance, the "agreement to differ" between the members of the "national government" may not have been a very dignified political manoeuvre, but it hardly calls for the portentous solemnity with which Prof. Laski treats it.

In the next chapter, "The State and the International Community", he argues that "war is rooted in the capitalist system". For "so long as the effective purpose of the state, internally regarded, is to protect the principles of capitalism, so long, in its external aspect, will it require to retain the use of war as an instrument of national policy". This is particularised by the familiar arguments about the search for markets and the need to protect the interests of investors in foreign countries. But the chapter, as a whole, seems to me very definitely the weakest in the book. There is much more dogmatic assertion, and much less coherent argument, than anywhere else. And there is certainly a total failure to appreciate the arguments which could be brought against the position.

There is one particular line of thought, underlying a great deal of this chapter, about which a word must be said, because it plays a considerable part in Prof. Laski's argument. In an earlier chapter he has argued against those who claim that the present economic troubles arise not from capitalism but from a perversion of capitalism, and maintained that their capitalism is merely an abstract conception and has no necessary connection with the actual working of capitalism in the real world. Up to a point this seems to me undoubtedly sound. If the same motives as form the essential driving force of capitalism also lead people to actions which hinder its efficient working, then this points to a real self-contradiction in the system, which is a legitimate ground of criticism. But to lump together indiscriminately everything that occurs in a country where a capitalist system exists as being due to capitalism is to abandon the task of analysis altogether and to render oneself quite helpless either to understand the past or to prophesy the future. Yet this is what Prof. Laski seems to be doing when he writes, "If we assume, as in life we are bound to do, that capitalism is what capitalists do, then we must regard the habits of those States dominated by capitalist interests as characteristic of capitalism". On such lines it is very easy to prove that war, or anything else, is due to capitalism.

The last chapter, "The Outlook for our Generation", is concerned, as the title implies, with the actual situation confronting us. It is remarkable for the honesty with which Prof. Laski recognises facts which to me, at anyrate, seem to contradict or at least seriously

to modify his previous conclusions. Thus the working class instead of being a uniform body of potential revolutionaries is seen to contain most divergent elements and to be, in the greater part of it, not revolutionary at all. Revolution, instead of being an inevitable and regular occurrence, appears as the occasional result of an exceptional combination of circumstances. The circumstances which give it a chance of success are more exceptional still. And this leads Prof. Laski to his final, extremely pessimistic, conclusions. It would be madness in most countries for those who wish to alter the economic structure of society to attempt to do so by violent revolution. They must attempt peaceful and constitutional methods. On the other hand, it would be almost equally foolish to expect these to succeed. For the whole lesson of history is that a class in power will never abdicate peaceably. The best that Prof. Laski can hope for, if I understand him rightly, is that the Fascist régime which will be the inevitable result of an attempt to establish Socialism by democratic methods, will in the long run prove so intolerable that a real chance of successful revolution will ultimately arise. And with this desperate conclusion we are left. It is difficult to see after this how Prof. Laski can criticise any alternative policy on the grounds that its chances of success are small.

A full and detailed criticism of all this would, of course, demand a book of at least equal length to Prof. Laski's. Here it is only possible to indicate the lines on which, in my view, such a criticism might run. It seems to me that Prof. Laski's arguments and evidence hardly ever prove as much as he thinks they prove. But they nearly always prove something. And any criticism would have to start by recognising how much of truth there is in his contentions. It is true that our views of good and evil are influenced by our economic circumstances and the class to which we belong. It is true that governments tend to be biased in favour of the existing order of society. It is true that those with economic power can always influence, and sometimes control, the policy of governments. It is true that there is conflict of interests between different classes. All this, and more, can be fully recognised without in the least conceding Prof. Laski's main contention. For the question at issue is not between recognising these economic factors and ignoring them altogether. The view that could most reasonably be set against Prof. Laski's would regard them as one set of influences among others, none of which are reducible to or determined by one another. They influence each other, but the influence is mutual. And they also, on occasions, oppose or check each other, so that the resultant conduct is due to a balance of various forces.

I should maintain that the facts of human conduct, both in individuals and societies, are more in accordance with this view than with the other. I am aware that Prof. Laski maintains that his view recognises fully the reality of these other influences. But like most Marxists he takes back with one hand what he gives with the other.

For he insists that they are conditioned by economic factors, and seems to deny them any independent force of their own. The discussion of such a thesis would demand a very wide survey of historical and political events. But one general observation is suggested by Prof. Laski's argument. He makes great play with somewhat question-begging epithets such as "important", "fundamental", or "essential". And he seems to me at times by the use of such terms to be in grave danger of establishing his conclusions by implicitly assuming them in his premises. In almost any historical situation or series of events it is possible to find certain economic factors at work and certain results produced by them. And if you dismiss everything that cannot be traced to these as unimportant it is easy to show that the economic factors are responsible for all the important results.

Somewhat similar considerations arise in connection with the discussion of the possibility of a peaceful transformation, rapid or gradual, of the economic structure of society. One may note in passing that Prof. Laski's conviction of the impossibility of this cannot be based, as he claims, on the experience of history. For we have no experience so far of this being even attempted in a democratically-governed country. There has not yet been an occasion on which a clear parliamentary majority has been freely and constitutionally elected with a mandate to substitute a socialist for a capitalist regime. So we have no experience from which to judge how far the supporters of capitalism would go in their resistance to such a mandate. The experience of the Fascist and Nazi revolutions, even accepting, for the sake of argument, Prof. Laski's highly oversimplified account of them, will not help us here. For in both cases it is clear that, so far as they were motivated by a fear of Socialism, it was not the prospect of a parliamentary majority that aroused this fear but the supposed prospect of a violent revolution.

But to return to my main argument, Prof. Laski states, as fairly as is possible in a very brief summary, the grounds on which those who believe that there is some possibility of the peaceful transformation of society base their belief. They would argue that so many changes have been brought about, either by direct legislative action or by gradual evolution, which have met with the strong opposition of employers and capitalists, that it would be very arbitrary to say that the process cannot be carried on beyond the point reached at present. In reply to this Prof. Laski once more bases himself on his distinction between the essential and the non-essential points, or, to use the military metaphor which he favours in this connection, between the outworks and the citadel of capitalism. But it is open to dispute whether this distinction is as clear-cut as he assumes. Certainly, as he himself shows, many of the reforms that have been carried through were regarded by those who opposed them at the time as touching the essentials. And, judged by the standard of human happiness, it is by no means clear that some of the

"out-works" may not turn out to be as important as the "citadel", wherever that may be placed.

For it is by no means obvious where, in Prof. Laski's view, the "citadel" is to be looked for. There are indications that he would place it in the private ownership of capital. Yet ownership is not really a single simple thing. Certainly there are enormous differences of degree under different institutions in the real power which it can give and the freedom with which it can be exercised. In fact, recent researches seem to show that to an ever-increasing degree the actual control over economic organisations is exercised by administrators who may not be owners at all. It will no doubt be replied that they exercise their control in the interests of the owners. And there is doubtless much truth in this, though I do not believe that it is by any means the whole truth. But the task of transfer to the State would obviously be very much easier the more the actual control was in the hands of administrators instead of owners.

Similar considerations apply to the claim that the Marxist analysis is a valuable instrument for prediction. Even put at its highest the claim is only to predict the most important or fundamental features of the future. And this easily becomes something so general and indefinite that it is of no practical help to anyone. Alternatively it may rest on an arbitrary selection of certain points which the Marxist declares to be important, while on many other points which to other people seem of just as much importance in affecting the quality of their lives no guidance is given. In fact, however, it does not seem to me that the claim to a special success in prediction is made out. It is possible, of course, to point to certain correct predictions made by Marx, Engels or others, just as it is also possible to point to certain failures. Even of the successful predictions it is not always easy to see that they are in any sense deductions from the general theory. Shrewd observers of an existing situation have often been able to produce successful predictions without recourse to any particular theory. On the other hand, for the purpose of short-range predictions and anticipation of the reactions of existing individuals to particular situations, the Marxist theory appears to be an extremely bad instrument. Prof. Laski clearly shows that Communist tactics in most countries have attained the height of ineptitude.

This may be connected with another point on which Marxist theory in general seems to be particularly weak, though there is not space to do more than mention it here. That is its neglect of psychological analysis. It is, indeed, sometimes proclaimed as a virtue that it concentrates on so-called "objective" causes and not on the mental processes of individual human beings. But, however important the objective causes may be, they only produce their effect by working on and through the mind of individuals. And if that side of the process is inadequately treated, only half the work is done. I suggest, further, that when we start on this part of the work we

speedily find that Marxist categories and assumptions do not take us very far. This is not, by the way, to prejudge the question how far human conduct is determined by external influences and how far by native human tendencies. But if this is a real question at all, as it most certainly is, it is obvious that it cannot even be considered until an analysis of the psychological factors in the situation has been made. I am inclined to think that the tendency I am criticising arises in part from the lack of a proper philosophical analysis of the notion of cause as applied to human conduct. Such an analysis might seem rather remote from the urgent needs of the present situation. Yet if we set out to provide a philosophical basis for our policy it would have to be made.

This weakness is responsible for what seems to many people a further weakness in Marxian exposition generally, from which Prof. Laski is not entirely exempt. That is the inability to be at all clear or convincing about the way in which the state of society to which they look forward will work. As I understand it, orthodox Marxists tend to deprecate any attempt to give such a picture as Utopianism. But this is surely to abandon a great part of the claim of the Marxist theory to be a practical instrument of prediction. Certainly most people, in a reasonable mood, if they are invited to join in an attack on the present order of society, will want to know what they are letting themselves in for as an alternative. If they are at all critically minded, they will not accept the assumption that, because certain evils can be shown to arise in the working of the capitalist system, we have only to abolish this system for the evils to disappear automatically. Yet such an assumption seems to be at the back of a good deal of Marxian argument. I have already suggested that it can be detected at times even in Prof. Laski. In some of the lesser lights it appears as a simple faith in the possibilities of "conditioning" for which there is no warrant in any known facts. And Prof. Laski himself occasionally seems to approach this level of naïveté, as when he assures us that there can be no possible grounds for war between Socialist states.

I should like to add, as a sort of footnote, a word on one special point. Prof. Laski has been criticised in several quarters, sometimes with special reference to this book, for encouraging those who learn from him to look much too readily to violent revolution as a proper means of securing their ends. I do not think the criticism is a fair one. But to a certain extent Prof. Laski has himself to thank for the mistaken impression. His general plea that some revolutions have produced a balance of good over evil, and that therefore we cannot condemn revolution absolutely as always and necessarily wrong, seems to me undoubtedly sound. So does his further argument that in the last resort individuals have to exercise their own individual judgement as to whether the circumstances of the time are such as to justify revolution. But he does not seem to me to make clear what considerations must be taken into account in

exercising this judgement. The language which he uses at times, as in the passage quoted above, about the desirability of using peaceful means being rather a matter of tactics than of moral right, seems to suggest that the only considerations to take into account are the importance and desirability of the end aimed at and the chances of success. But this is to ignore certain inevitable concomitants of revolution which make it always and necessarily evil, even though on rare occasions the evils against which the revolution is directed are so much greater that the particular revolution may be justified. All the evils which we can summarise under the title of "war mentality" are necessarily produced by revolution and violence in internal affairs, even more than by external war. The advocate of revolution, therefore, has to remember that, however good the end aimed at, his methods will inevitably bring certain evils which must be carefully weighed in the balance. I do not for a moment suppose that Prof. Laski is oblivious of these, but I think it is unfortunate that he does not stress them in his argument.

I should not like to end on a note of criticism. I had occasion, after reading Prof. Laski, to turn to some of the more orthodox expositions of Marxian theory. And the contrast in tone and temper was so marked that I turned back to Prof. Laski with greatly heightened appreciation. Those who are more impressed by reasoned argument than by bluff and bluster will do well to give this book their serious attention.

G. C. FIELD.

Die philosophischen Strömungen der Gegenwart in Grossbritannien.
By RUDOLF METZ. Leipzig: Felix Meiner, 1935. 2 vols.
Pp. xvi + 448, vi + 360. Unbound RM.36, Bound RM.40.

THE name of Dr. Rudolf Metz is a familiar one to every reader of German philosophical literature. He has been for some time the acknowledged exponent of British thought in Germany. He reviews English books frequently, and his own helpful works on Berkeley and Hume are well known in this country. He now increases our indebtedness to him with this excellent study of contemporary English thought, a study so thorough and comprehensive that it must have involved its author in very great labours. In all some two hundred writers are considered, and though it is impossible to believe that Dr. Metz has himself read all the works of these men, it is clear that he has read a great proportion of them, for he always seems to be writing at first hand and to be well acquainted with the books which he is discussing. Naturally, he writes at greater length of some authors than of others, and the portraits which he then presents are almost without exception well done. But he has also taken pains with the presentation of the less important figures. To me the surprising thing is the excellence of these shorter sketches. Sometimes

they are merely cameo-sketches, but they succeed admirably in presenting the man and in making his significance and place in English philosophy clear.

Dr. Metz, however, does not confine himself to a discussion of individual authors. His chief purpose is to trace the various tendencies at work in contemporary British thought. Accordingly, he tries to group his authors so as to bring out the movements which they represent. He admits in his preface that such a grouping may be artificial and that a false interpretation can be put on the works of individual authors by forcing them into a pre-arranged scheme. This charge, however, is hardly likely to be brought against the present work. Few of the writers discussed in these pages are likely to grumble that they have not been fairly represented or fairly grouped.

The book is divided into two parts; the first is devoted to mid-nineteenth century philosophy up to the coming of idealism, the second to the last fifty years or so. Thus the work covers almost a century's thought, although Part I. is in a sense introductory. Accordingly, the term "present" in the title of the work includes the immediate past, so much of it, at least, as is essential for the proper understanding of the present situation. For the most part Dr. Metz confines himself to the *exposition* of his authors and eschews criticism; his method—the only possible one if the book was to be kept within reasonable lengths—is to allow one school to criticise the other. In exposition he is very fair and objective. Sometimes one catches a glimpse of the author's own likes or dislikes, as in the section on Russell; but this is rare. The one criticism I am inclined to make of his scheme as a whole is that a final chapter should have been added, in which the author might have summed up the present position. I wish Dr. Metz had told us what tendencies, in his opinion, are likely to prevail, and what he thinks of the prospects of British philosophy. Such a final chapter, of course, would be difficult to write; but Dr. Metz enters upon the task in the opening sections of the chapter on the new realists, and I wish he had completed it. It would be highly instructive to get the opinion of one who knows so much about British thought and yet speaks from outside. But perhaps Dr. Metz will oblige us later in an article or a shorter book.

Part I., written in bright, forceful language, gives an interesting account of the position of affairs in Great Britain towards the middle of the last century. It deals with the Scotch school, with the utilitarians, the evolutionists and, finally, with the religious philosophy of such writers as Newman on the one hand, and Martineau on the other.

The Scotch school begins with Reid, but he is outside Metz's field of study. By the middle of the century this school dominated the situation. It reached its peak in Sir William Hamilton, linked to Reid through Dugald Stewart, Thomas Brown and James Mackintosh. But Hamilton, who was acquainted with Kant, was no blind follower

of Reid. He was critical. Yet his effort to synthesise empiricism and criticism, and so save common-sense philosophy, was itself subjected to criticism both by J. S. Mill from the empiricist point of view, and by the idealists from the Kantian and Hegelian standpoints. After Hamilton the Scotch school declined, but it was not without its influence on what followed. Metz thinks that J. S. Mill, for instance, or again Cook Wilson, cannot be understood unless we take this influence into account. Passing to utilitarianism, Metz argues that this school did not so much discover new truth as apply already-established empirical principles within new spheres. It was "an extensive rather than an intensive movement" (p. 24). This view of the situation is no doubt true, speaking generally, although too much may be made of it. Considering in turn Bentham, Godwin, James Mill, Austin, George Grote, Herschel and Whewell, Metz naturally gives chief place to John Stuart Mill. He tells the interesting story of his early life and of his break with the narrower forms of utilitarianism. The main theme of his exposition is Mill's adherence to empiricism and his dislike of speculative metaphysics. This explains his animosity towards Hamilton and his total lack of sympathy with German speculative thought. Of the later utilitarians Metz considers Fowler, Sully, Buckle, Lecky, Leslie Stephen, Sidgwick, Carveth Read and Croom Robertson. (Incidentally, in commenting on the latter's editorship of *MIND*, Metz pays this journal the compliment of being "by far the most important philosophical organ of the English-speaking world" (p. 52).) It was no easy task to summarise the teaching of Sidgwick, the most important of the thinkers of this group, but Metz brings out the main points very well. He is right also in emphasising the importance of his method, objective, neutral and analytic. Metz thinks that he, more than anyone else, is responsible for the present methods of Cambridge.

Having dealt with the Scotch school and the utilitarians, Metz presses forward to the evolutionists whose impulses came from the Darwinian hypothesis on the one hand and from Malthus's theory of the "struggle for existence" on the other. The chief figure that emerges is Herbert Spencer. His name, Dr. Metz tells us, is better known in Europe than is that of any other nineteenth century English thinker. This is partly due to the fact that, unlike most English thinkers, Spencer was eminently systematic. Dr. Metz sets out very clearly the main lines of his philosophy and suggests that his solutions were sometimes too simple and the structure which he erected almost too neat. A word is added about T. H. Huxley, in whom Metz perceives a conflict between agnosticism and materialism, Tyndall, Maxwell, Pearson, Romanes, W. K. Clifford, with his mind-stuff theory, and G. H. Lewes, who first, if Metz is correct, made use of the term "emergent" in the modern sense. The chapter concludes with a more serious study of L. T. Hobhouse, whom Metz clearly admires. He is, of course, no mere evolutionist. If anything, his debt is greatest to seventeenth-century empiricism. But Metz

thinks that his affinities with the naturalist school are close enough to allow of his being treated here. He was erudite to the last degree, and eclectic. His aim, Metz thinks, was rather to synthesise various systems of thought, including idealism, than to create a new one of his own. (This chapter has an appendix in which English positivism is sketched in a very interesting manner.) In the fourth and final chapter of Part I. Metz deals with the religious philosophy of the period. J. H. Newman, who is first considered, was no obscurantist. He was not even a scholastic, but an empiricist. Moreover, to some measure he foresaw both the pragmatism and the life-force philosophy of later days. W. G. Ward, who was also in the Oxford Movement, followed the Scotch school more closely. The other outstanding influence from the side of religious philosophy—although he came later—was James Martineau. (A remarkable fact about him is that he did not begin to publish his more important works till he was eighty years of age.) Metz depicts him as the philosopher of human freedom. Amongst others mentioned here are C. B. Upton, Estlin Carpenter, F. D. Maurice, Gore, A. C. Fraser and Robert Flint.

We are now ready for Part II., an examination of English philosophy in our own day. Firstly, the idealist movement is considered and then pragmatism. There follows an account of two groups of realists, the older and the new. This in turn is followed by a short chapter on mathematical logic and logistic, then comes another on the scientists of the day who occasionally philosophise, a third on psychology, and finally a chapter on contemporary religious philosophy. The discussion of idealism, which is a full one, takes up the second half of the first volume, while the rest of Part II. makes up the second volume.

Dr. Metz begins his account of the British idealist movement in the nineteenth century by protesting against a view set forward by Muirhead in his book on the Platonic tradition, to wit, that the idealist movement was a development of something wholly indigenous to English thought. Metz contends that it owed everything to German thought, particularly to Kant and Hegel. The truth, I venture to think, lies somewhere between the two views. Undoubtedly the new impulse in the middle of the nineteenth century came from Germany, but when I read Green, Bradley and McTaggart, not to mention writers like Pringle-Pattison, they do seem to me to be developing something genuinely English. One does not get the same impression, admittedly, in reading Edward Caird and some of the earlier idealists. But I should not be prepared to deny Muirhead's thesis in its entirety, although I recognise the force of Dr. Metz's argument.

One of the most interesting things that comes to light in this section is the fact that British idealism is almost unknown in Germany. While much attention has been paid to Mill, Spencer, Russell and some others, none at all—or, at most, very little—has been given to the idealists. Metz tells us that Bosanquet, for

instance, is, to all intents and purposes, unknown in Germany. A translation of Bradley's *Appearance and Reality* appeared in 1928, but practically no copies of it have been sold. Yet one might have thought that the Germans would have welcomed a philosophy so very Hegelian. But even the closest German students of Kant and Hegel, it seems, have given little attention to the movement which dominated the English mind for a generation.

Metz opens with a chapter describing certain movements which heralded idealism. Coleridge and Carlyle together, in very different ways, introduced German philosophy into this country. It would be wrong to call Hamilton, J. Grote, F. D. Maurice and J. F. Ferrier Hegelians, but they were certainly interested in Hegel, particularly the latter, and drew attention to him. The renewed interest in Greek philosophy was also a potent factor in the rise of idealism. This interest was, of course, largely the result of Jowett's teaching, but in his early years in particular he also was interested in Hegel and introduced him into Oxford. After being thus heralded the movement found its actual pioneers in Hutchison Stirling, Green and Nettleship. Hutchison Stirling is depicted as an enthusiast who was occasionally capable of profound observations. His *The Secret of Hegel* marks the beginning of idealism. In the main Metz agrees with the view expressed in the *bon mot* that if Stirling did know the secret of Hegel he kept it entirely to himself. Green is obviously a more important figure, and Metz is aware of his greater significance for English thought, particularly in the realm of moral philosophy. Of Nettleship he has little to say. Turning now to the Hegelians proper, the first and the greatest of them is Edward Caird. I thought the essay on Caird admirable. Caird's exposition of the Hegelian philosophy, we are told, was never cold and objective. He found in it a living doctrine and expounded it as such. His greatest work of exposition, it is true, is concerned with Kant, but the purpose of his study of Kant was to show that what was living in his philosophy led inevitably to Hegel. He took over as the central conception of his system the concept of the Absolute which he identified with the Deity, thus taking up, in Metz's opinion, a position best described as a rationalist pantheism. Amongst the other Hegelians considered here are John Caird, Wallace, Ritchie and Sir Henry Jones. Of the last Metz remarks: "In Jones, one might say, Hegelianism became emotional" (p. 283), a neat cut not altogether undeserved. Metz, however, recognises his sterling qualities as a teacher. We now come to two writers fortunately still with us, namely, Muirhead and Mackenzie. J. H. Muirhead is to be congratulated on reaching his eightieth birthday this year—if Metz's dates are correct. (The doyen, however, is Lloyd Morgan who is three years senior to Muirhead.) Metz compliments Muirhead on his breadth of outlook and on his sympathy with and interest in positions other than his own. He has carried forward the idealist tradition but in no dogmatic spirit. The same is true of Mackenzie. Metz shows how

the conception of the Absolute developed in the hands of these later Hegelians. With Mackenzie it is no longer a static Absolute, but a cosmic creative impulse. Finally, Metz notes Haldane's relativism, the developments in Sir James Baillie's thought, and the fine scholarship of J. A. Smith.

Next are considered the Absolute Idealists, Bradley, Bosanquet and Joachim. I do not feel that Dr. Metz in his treatment of these three, particularly of Bradley, has succeeded so well as he has done elsewhere. Much that he says in general about them is very fine but, for instance, his account of Bradley's logic is inadequate in detail. Perhaps we ought to congratulate the author, however, on going as far as he has gone; for Bradley's *Principles of Logic* must be most difficult for a foreigner to understand, and Dr. Metz does tell us much about Bradley's logic which is sound and helpful. Yet it is obvious throughout that he is not at home here. He is on surer ground in discussing Bradley's ethics and metaphysics. The essay on Bosanquet is better, I think; but again it is somewhat superficial. However, he makes a very interesting comparison between Bradley and Bosanquet, and there is certainly much truth in his central criticism that in Bosanquet's system the individual is lost in the Absolute. Finally, an account is given of Joachim's *The Nature of Truth*, a book which Metz admires for its frankness and honesty, and for the light which it throws upon the inherent difficulties of idealist epistemology.

McTaggart, who is next considered, gets a section to himself, for he is rather difficult to place. He is idealist, but his pluralism makes it impossible to group him with the Absolutists. His debt to Hegel is plainly great, although he was also influenced by Berkeley, Spinoza and Leibniz. From Hegel he borrowed his dialectical method, though he developed this in his own way. Metz devotes most of his space to McTaggart's *Nature of Existence*, and gives an interesting account of its central conceptions. He thinks that McTaggart's real contribution to philosophy lies in his re-emphasis of one point, the being and worth of individual personality. It was not only McTaggart, however, who felt the need for resuscitating the individual in view of the absolutist philosophy. At the turn of the century a mild revolt occurred within the idealist ranks in connection with this very matter. Metz groups the leaders of this revolt, Pringle-Pattison, James Seth, Sorley and Rashdall, under the heading Personal Idealists. He outlines the philosophy of the former to illustrate the character of the revolt, neatly describes Sorley's position as ethical or axiomatic idealism, while Rashdall becomes "the fanatical apostle of individual personality" (p. 406). Religious philosophy which is also idealist is represented in the persons of C. C. J. Webb and Temple. (The latter's Gifford Lectures were published too late for discussion here.) But Metz also includes under this head James Ward and A. E. Taylor, though it is doubtful whether they are rightly to be classed with idealists, as Metz admits in the case of Ward. The account which he gives of the development in

Taylor's thought from his early *The Problem of Conduct* to *The Faith of a Moralist* is interesting. The first volume closes with brief sketches of certain other thinkers difficult to place, Laurie, Douglas Fawcett, Bax, Hoernlé and Wildon Carr.

The second volume opens with a neat account of pragmatism in England. F. C. S. Schiller naturally gets the chief attention. Of him Metz thinks highly. "Amongst contemporary British philosophers he is the controversialist *par excellence*, the adroitest fighter, the best and liveliest writer" (p. 7). His earliest work, *Riddles of the Sphinx*, revealed the brilliant controversialist, and for a generation he has carried on the fight unceasingly against idealist, naturalist, realist—in a word against all who are not of his school. And since his disciples are comparatively few Schiller's opponents are legion. He was, of course, much influenced by American thought, particularly by William James. Metz gives a full account of his work, and thinks his chief contribution to philosophy lies in his criticism of logic. A word is also added about A. Sidgwick, H. V. Knox and H. Sturt.

We now come to the realists. Metz sets up a distinction between the older and the new realists. By the older realists he means those thinkers who remained realist when idealism was predominant, together with their immediate disciples. The new realists are the later group who have written since 1900. This division is a little artificial, seeing that, for instance, Alexander and Lloyd Morgan are amongst the new realists, and Dawes Hicks and Prichard amongst the older. Still some division was no doubt necessary now that almost all philosophers are realists of some sort or other. Amongst the older realists Metz considers Shadworth Hodgson, Robert Adamson, Dawes Hicks and Cook Wilson. The first is a critical empiricist, whose phenomenological analyses are still worthy of study. Adamson is praised for his scholarship. His conversion from his earlier idealism is also described. An appreciative account is given of Dawes Hicks's critical realism, while what is said of Cook Wilson is sound, so far as it goes, although this can hardly be called an adequate presentation of his philosophy. Metz complains that it is exceedingly difficult to summarise Cook Wilson's position. As followers of Cook Wilson the author deals briefly with Prichard, H. W. B. Joseph and Ross—much too briefly, I should say, to do anything like justice to these writers.

The section on the new realists opens with a valuable introductory discussion in which Dr. Metz puts forward somewhat provocative views. "With new realism British philosophy has re-discovered its own true self" (p. 79). British idealism—like pragmatism—was originally a foreign importation and it never really suited the British genius. But with new realism we are back again on the beaten track, and Metz seems to think there is more hope for us now that we face our problems once more in the spirit of John Locke and the empiricists. He shows how the revolt against idealism matured,

first in theory of knowledge, then in logic and, finally, in metaphysic. (He also shows how the new stress on analysis came into being and is inclined to think that it is a little over-emphasised at the present moment.)

The opening studies in this section are easily the best in the book. They are studies in the philosophies of Moore, Russell, Whitehead and Alexander, and it is clear that the author has given them much attention. Moore he describes as the pioneer, whose authority, however, has not been superseded but remains the chief factor in the movement which he has brought into being. He shows the significance of the famous 1903 article, discusses Moore's method, his epistemology and moral philosophy. (He does not take into account some of the later papers of Moore on moral questions which considerably modify the standpoint of *Principia Ethica*.) He opens his essay on Russell with some very lively description which I shall not try here to summarise. He traces his intellectual history and considers his place in philosophy. He expounds his views on logic, epistemology, his theory of matter and of mind. Metz recognises the tremendous influence of Russell not only on Great Britain but on the world in general. In his immediate influence, at least, he is certainly the most influential thinker of the age. From Russell Metz passes to Whitehead. Most attention is given here to *Process and Reality*, which is described as "a book with seven seals". To judge from the lucid summary of Whitehead's philosophy given here Dr. Metz has succeeded in opening several of these, but he finally confesses that Whitehead's metaphysic remains a labyrinth rather than an ordered system. This is not true of the fourth writer, Alexander. The system which he has erected in *Space, Time and Deity* is clear-cut and orderly, and a good account of it, together with the theory of knowledge on which it is based, is given. An account is also given of Alexander's early ethical theory in *Moral Order and Progress*, but none of his later æsthetic theory. Metz touches on the conception of emergence in Alexander's philosophy, but his fuller examination of it is to be found in the study of Lloyd Morgan which follows that of Alexander. He has also some interesting things to say about Lloyd Morgan's theology. From Morgan we pass to Broad. Broad's personality colours his philosophy to a marked degree. In his cold objectivity, his unemotional nature, his hatred of enthusiasm and 'uplift', his failure to appreciate art, he is, Metz thinks, "the typical Englishman" (p. 209). (One also senses in this passage the author's own delight that he himself belongs to a less frigid race.) At the end of his essay on Broad, however, Metz confesses that he is disturbed by one contradictory circumstance—Broad's enthusiasm for psychical research. The account given of Broad's work is inadequate in that it says nothing of his contribution to moral philosophy, but considerable attention is devoted to his theory of perception and to his epistemology. Satisfactory accounts are given of Laird, Nunn and Kemp Smith. Of Joad, Metz is somewhat critical.

W. E. Johnson is grouped here—rather oddly, though it is difficult to know where else he could go—as are J. N. and J. M. Keynes and J. E. Turner. Of the younger realists, appreciative mention is made of Reid, Price and Ewing.

Metz adds a slight chapter on mathematical logic, for whose brevity and superficiality he apologises at the outset. In it he is much helped by C. I. Lewis's *Survey of Symbolic Logic*. He traces the growth of logistcs from Leibniz through De Morgan, Boole, Jevons, and Venn, and adds a word about *Principia Mathematica*. He brings rather an unsatisfactory chapter to a close with discussions of Wittgenstein, Ramsey and Prof. Stebbing, whose work he praises. He is much happier with the next group, a group of scientists who have made philosophical contributions. I found that the accounts of Lodge, Eddington, Jeans, J. A. Thomson, J. S. Haldane, and J. C. Smuts made interesting reading. Turning to the psychologists he rightly gives the place of honour to G. F. Stout, on whom he writes a long and valuable essay. He also gives detailed consideration to the work of William McDougall. Other writers mentioned are Shand, Spearman, Drever and Thouless. He adds a word about the influence of behaviourism, psycho-analysis and psychical research, on contemporary psychology in England. Lastly, he considers the religious philosophy of the day. He begins with Balfour, but pays most attention to Inge and von Hügel, whose philosophies he expounds very lucidly. Streeter, Tyrrell and some neo-scholastics are also mentioned.

I have here attempted to give the reader some impression of the contents of this book. I can only repeat that, so far as I am able to judge, it is an admirable survey of the present position. There are one or two defects. The author has apparently overlooked some three or four philosophers who ought, I think, to have been considered. Then some parts of the work appear to me to be a trifle superficial, while there are points of detail where it is difficult to agree with Dr. Metz's interpretation. None the less, no fair reader who takes into account the difficulties of the task which Dr. Metz set before himself can deny that he has been eminently successful. The book may be somewhat lengthy for reading through from cover to cover, although it is so pleasantly written that such a reading would certainly not be tedious. But—if one may use again the familiar *cliché*—as a work of reference it is indispensable. It is to be hoped that it will be translated into English, so that its usefulness may be still further increased. The publishers have also done their share, in producing a book which it is a pleasure to handle; and it is a privilege to be permitted to thank both them and the author for this gift to British philosophy. One's pleasure is heightened in the realisation of the fact that this brilliant acknowledgment of another nation's achievement should have come from modern nationalist Germany.

R. I. AARON.

Art and Morality. By O. DE SELINCOURT, Lecturer in Philosophy at the Queen's University, Belfast. London: Methuen & Co., 1935. Pp. lx + 284. 10s. 6d.

MR. DE SELINCOURT takes his start from the conflict provoked by the claim of morality to subject art to moral standards. The conflict is familiar enough both in reflective theory, as in Plato and Tolstoi, and in more superficial popular controversy. The cry, "Everything for the sake of Morality", naturally stimulates the rejoinder "Art for Art's sake". In his discussion of this issue in his opening chapters, Mr. de Selincourt shows himself scrupulously careful to do justice to both contentions. While recognising fully that "art has standards of its own which are different from those of the moralist", he acknowledges that "even when the criticism advanced from the æsthetic point of view has done its worst, we must concede to the advocates of the moral attitude that art can be subject to moral judgement, whether favourably or unfavourably, both in itself and in the influences which it can exert; and that the standards of moral judgement, even if they cannot subordinate art to morality, are peculiarly comprehensive and extensive" (26-27). Moreover, the two activities are often found in harmony; the greatest art, for instance, seems to give expression to man's ethical interests and to exercise profound moral influence. This points to a close affinity underlying the admitted difference of valuation. Thus, if we refuse, as we needs must, either to subject art wholly to morality or morality to art, there arises a problem of speculative as well as of practical importance, as to their mutual relationship. The present work is devoted to its discussion. It has never, to our knowledge, been treated by an English writer systematically and for its own sake, and to have done this with remarkable thoroughness and ability is Mr. de Selincourt's title to originality. His method might be called dialectical, for he proceeds, from the starting-point above-mentioned, by an examination of the relations first of art and then of morality to "other things", to unfold the nature of æsthetic and moral experience and their interrelationships; while the answer thus reached to the initial problem broadens out in the later chapters into a systematic theory of values, in their connection one with another and with morality, which, though not the direct object of the book, constitutes, as the author tells us, its "chief general implication". Thus none the less really, because indirectly, he has made a significant contribution alike to æsthetics, to ethics, and to the recently developed and still inchoate study of axiology. The way in which the horizon expands, as we move forward under Mr. de Selincourt's skilful guidance, is one of the most attractive features of the book. In method, as in much else, he shows himself a not unworthy follower of Plato. The theme is developed with a rigour of argument, a precision of statement and a penetrative insight into the matters under consideration that merit high commendation from the philosophic

reader. There are no loose threads in the reasoning, no irrelevancies in the manner in which it is expressed. Every phrase has been carefully measured, and the general conclusions offered are guarded by the most cautious qualifications and put forward only after an exhaustive and impartial examination of the case. Herein lies the chief value of Mr. de Selincourt's book and at the same time its most serious defect. It is at once so excellent and so difficult in the reading. Were the difficulty due merely to the complexity of the subject, we should have no cause to complain. Its source, however, lies partly in the paucity of illustration, partly in the involutions of the author's language and argument. The reasoning is so abstract and so intricate that the reader is continually losing his way amid the maze of reservations. It becomes increasingly hard as we go on to see the wood for the trees. The introductory summaries to each chapter, instead of proving an aid, are frequently cryptic save in the light of the pages that follow. That Mr. de Selincourt's statements always prove on examination to have a meaning, and that the meaning when recognised justifies the effort necessary to reach it, is indisputable; but it is unfortunate that so admirable a book should be barred to the reader unversed in philosophic subtleties by a demand on his patience to which he will hardly be willing to respond. We do not, however, wish to suggest that these defects in presentation detract from the importance of the book as a serious contribution to philosophy. It is no light task for a young author to emulate Plato in combining ἀκρίβεια with lucidity.

Having relieved our conscience by this criticism, we can follow Mr. de Selincourt through the chief stages in his argument. We cannot hope, within the limits of a review, to do justice to its subtle ramifications, nor to do more than indicate *en passant* a few points that seem open to objection.

After having shown in the first chapter that art and morality must be judged by different standards, Mr. de Selincourt proceeds (chaps. ii-iv) to consider, first, the relations in which art stands to "other things", by which he means things not specifically æsthetic but common to art with other activities of the spirit. Taking certain acceptable doctrines of Croce as a provisional clue, he distinguishes (a) art as contemplation from morality as practice, and (b) art as contemplation of the individual from science and philosophy as conceptual *theoria*. Further, Croce provides, for æsthetic, as also for other forms of activity, the formula of imposition of form upon matter, and indicates emotions and thoughts or meanings as the materials which art expresses and communicates. The sensuous materials of art, however important in themselves, may here be relegated to the background, as possessing but secondary relevance to the problem of the connection with morality. The chief point to notice is that the emotions and meanings that serve as materials for the artist are not a special class of æsthetic emotions and meanings, but just those of ordinary life. They are "other things" which the

artist uses for his purpose, and are equally amenable to treatment by the moralist and, in the case of meanings, by the scientist or the philosopher. There is no emotion that is *sui generis* æsthetic. In this connection, the author has some very interesting remarks to offer on the integration, in the æsthetic process, of emotions and meanings, pointing out how the emotional material acquires universality through fusion with thought, while thoughts are individualised, as is essential to their artistic embodiment, by fusion with emotion. The topic recurs again and again in the course of the enquiry, and we can only regret Mr. de Selincourt's reluctance to indulge in the full-dress metaphysical discussion of the universal and the individual which, as he admits, would be demanded in a systematic theory. In regard to meaning, he distinguishes the "subject-meaning," *i.e.*, the ideas initially in the artist's mind, from the "final meaning" of the finished work. He rightly insists that the former need not, like the meaning-materials of conceptual thinking, be capable of explicit statement. "It is clear, in fact, that art can communicate states of mind which are not precise and rational in nature but vague, and according to some beliefs, even unconscious, and which, since they are obviously the product of its processes, must presumably be relevant to it as material" (94). Indeed, one of the main sources of value, and of moral value, in art is its capacity to give formed expression to thought-matter, as well as to feelings, incapable of scientific or philosophical treatment. The analogy with religion, referred to more than once in these chapters, is particularly significant. In contrast to the "subject-meaning", the "final meaning", as embodying the results of the artist's activity, is of necessity æsthetic. The non-æsthetic materials are, of course, carried over into the final product, but they are transformed in the process, especially through the afore-mentioned fusion of meanings with emotion.

In what sense does art, thus understood, possess moral significance? Indirectly, by liberation (chap. iii) and by revelation (chap. iv). That the expression of emotion in art liberates from bondage to emotion is an old and familiar doctrine. We cannot enter here into Mr. de Selincourt's acute criticism of the Aristotelian theory of *κάθαρσις*, or into his own preference for the idea of purification over that of purgation, save to note an important suggestion as to the insight achieved by means of art into our emotional nature. "Æsthetic processes may help us to see our passions as something human and universal, and when this happens they lose the tinge of subjectivity and passivity which attaches to them in their unexpressed state" (69). Mr. de Selincourt appositely cites in confirmation Spinoza's teaching that in coming to know our passions we cease to be their slaves. The moral bearings of art are still more evident in its function as revelation. In art, as in religion, the insight vouchsafed "can possess the universality characteristic of truth" (99); nay, more, through association with emotion, the final meaning

secures "to some extent" a guarantee of its correctness (100). "By caring for something with which we are acquainted we can, not merely increase our acquaintance with it, but attain an insight into it of a different kind, which is no less universal in its implications, and often more effective for practical purposes, than mere acquaintance would be" (100-101). We only wish that this suggestion, that art, like religion, is self-critical in its activity, and can, by importing coherence into our experiences, legitimately claim to reveal truth, had been developed in fuller detail. The hint at the close (109) that the knowledge thus revealed is somehow 'less correct' than that of science and philosophy seems to imply the ascription to art of the meaningless conception of a 'practical' truth, distinct from, and inferior to, truth properly so-called. There is conceptual truth, and there is truth of intuition; but both, in so far as they are truth, surely stand on the same plane. On the other hand, Mr. de Selincourt has much that is significant to say on the contact furnished by art with the artist's personality, and on the power of great works of art to lift the spectator out of the world of everyday experience to the contemplation of all time and all existence, "as if the artist in creating them had tried to pack into his recalcitrant material of sound or colour or language all the incalculable mysteries of the Universe and of the human mind" (85).

Thus Art, over and above its justification as an autonomous activity, has also moral justification, in that (a) the emotions it expresses, the meanings it imparts, and the personalities with which it brings us into contact, all are capable of moral import, and (b) it performs through these the "specifically moral functions of liberation and revelation" (111). But thus far morality is displayed only "as a by-product of aesthetic processes" (129), and the problem of their conflict remains unsolved. In chapter v, perhaps the most important in the book, Mr. de Selincourt passes to consider morality on its own, and in its relation to 'other things', apart from its special connection with Art. The admittedly dogmatic statement of ethical views in this chapter is developed and defended in the three that follow (chaps. vi-vii), in such a way as to prepare the ground for a more extended discussion of intrinsic value (chap. ix), and of the interrelations of values in the final chapter (chap. x). What, then, is Mr. de Selincourt's theory of morality? In the first place, morality consists either in doing things or in bringing things about; in other words, in actions of persons which either realise a good immanent in the action itself or are instrumental to goods that lie beyond it. It may be questioned, by the way, whether the category of means and end is ever adequate to interpret action that deserves to be called moral. Secondly, the "things" which morality thus does or brings about are not actions but contemplations, *i.e.*, objects, identified later with personal experiences, which are contemplated as good. Contemplations alone have intrinsic value; save as conditioned by these, morality has neither existence nor value, its value being wholly

derived from that of the contemplations immanent in or produced by actions. Thus morality, though not in itself a good, is at once indefinite and comprehensive; for *any* action that realises a valuable contemplation may be moral, and morality, being without a province of its own, is limited to no specific field of spiritual activity. Contemplations, on the other hand, differ in kind, as the artist's *theoria* differs from that of the philosopher, and are incommensurable one with another. The chief kinds are truth, beauty, and love displayed in personal intercourse; the familiar triad being modified by the substitution of the last-mentioned for moral goodness. The denial to morality of intrinsic value furnishes Mr. de Selincourt with the solution of his initial problem. "The conflicts which really happen are between art and the other intrinsically valuable objects of contemplation; and what appear to be conflicts with morality are really conflicts with other activities in which morality is specially closely involved. Morality, in other words, is not so much a party to conflicts with art as a judge in the conflicts which arise between art and other activities; and even in this judicial office it cannot appeal to standards of its own to which art is subordinate, but only to standards of intrinsic value to which art is as relevant as anything else" (127-128). That the conflicts *appear* to be between art and morality is due to the confusion of moral action with pursuit of the value of personal intercourse, which "is often more urgent than art in its impact on the particular circumstances of the case". The grounds for this confusion in the affinities between the two experiences, as well as for the denial that morality is an intrinsic good, set forth in chapter viii, are less convincing than the argument, in the earlier pages of that chapter, in favour of the claims of personal intercourse to be regarded as a value, on a level with, but not, as some might suppose, superior to, art and knowledge.

We cannot discuss these views in detail, and must confine our attention to a single issue. In principle they are in line with the central tradition of ethics that all action is *sub ratione boni*, and that moral obligation is determined teleologically by reference to good. The objections to this position, familiar in recent ethical discussions, are fully discussed in chapters vi and vii. The charge to which many Utilitarian theories are obnoxious, that morality is thus rendered merely instrumental, is met by the recognition that the good achieved may be, as Mr. Joseph, for instance, has argued in *Some Problems of Ethics*, a form immanent in the willed action or, to take a wider view of morality, in the policy of life adopted by the persons who achieve it. That it is often right to perform acts and obey moral laws irrespective of the good exemplified in the action is accounted for on lines confessedly reminiscent of the Utilitarian tradition. The author lays much stress on the distinction between the external and internal aspects of the moral life. On the external side he holds that the rightness of an act depends on the value of the particular "states of affairs" which it realises. The difficult

question whether in this case the measure of value is the intended or the actual goodness is somewhat cavalierly brushed aside. "We can", he says, "restate our position by saying that unless the agent achieves, or intends to achieve, something which has intrinsic value, his action would be without any value" (149). Surely it makes all the difference, on Mr. de Selincourt's theory, whether the intention is in fact successful or not. There is also the wider issue whether the external features of an action, as such, are amenable at all to moral judgement. Is their "rightness" properly to be regarded as moral rightness? Does not morality enter in only with the reference to the will of the acting subject, *i.e.*, when we substitute for "this act is right" the only strictly moral judgement "I ought to do this"? Here, as elsewhere in the book, Mr. de Selincourt seems to use the term "morality" rather loosely. His discussion of morality on its internal side is more satisfactory. Motive is all important to moral goodness; and the morality here distinguished from the rightness of an action derives its goodness from the motive of devotion to good. What, then, about acts done for duty's sake? Mr. de Selincourt is at pains to do justice to the claims of moral obligation. "Duty seems to be the fundamental thing in morality and to constitute the best possible motive"; its rational quality is even more obvious than that of good. Yet it is derivative from good, as the form which devotion to good assumes in the face of conflicting inclination. But is there no such thing as action from duty when no counter desire is present? Mr. de Selincourt doubts this (157 *note*), surely misinterpreting Kant, as he also does (145-147) when he represents him as appealing to consequences in the well-known examples in the *Grundlegung*. His conclusion is that in a perfect state, beyond the bounds of man's present experience, duty will vanish in love of good. True; but is not this equivalent to asserting with the great Christian tradition, that morality, too, will vanish in a higher form of experience? "Both duty and moral feeling", we read (156), "must be regarded as simply different forms of the love or reverence for intrinsic good". The phrase "moral feeling" is surely infelicitous. The love of good is something more akin to religion than to morality, and further, must be sharply distinguished from feeling on the ground of its rationality. Mr. de Selincourt recognises this when he points out that the motive of devotion to good is directed not primarily to particular goods but to good universal. The burden of our criticism is that, for all his able and valiant endeavour, he fails to justify the claims of duty and therewith of the essentially moral moment in human experience. He assumes, apparently without hesitation, what many able writers since Kant have questioned, that the idea of obligation can be derived immediately from that of good. Yet he admits (125) that "urgency", or again, "impact on practice" must be appealed to, over and above consideration of what is best. It is not, then, simply a matter of calculation of value. How could it be, seeing that values are in-

commensurable? Personal intercourse, for instance, is asserted to have "a more urgent impact on practice" than art or other forms of value. Why? Surely because it is recognised as a more urgent obligation. And how can this be unless morality has its own standard of judgement, in the light of which it exercises its admitted function of preference between contemplated goods? But, in this event, the conflict is not, as Mr. de Selincourt holds, merely between contemplations, but between the *duty* to practise one contemplation and the *duty* to practise another.

We have passed over much that is important in these ethical chapters; for example, the penetrating discussion of the part played by intuitive insight into good in the moral life, and its relation to ancillary processes of discursive reasoning (177-185). Nor can we enlarge, as the subject properly demands, on the general theory of value set forth in the two closing chapters. In chapter ix, which mediates the transition to the exposition of the systematic connection between all values in chapter x, the author asks whether there is such a thing as intrinsic good, and, answering of course in the affirmative, whether morality can be held to be its sole source. He proceeds to consider the nature of such good, criticising Dr. Moore's theory of indefinability, and discovers it to consist in qualities additional to the factual qualities of good objects, those, namely, of satisfying desire and of coherence. Of these, the latter is avowedly the more illuminating: the former, indeed, can hardly stand on its own feet without being helped out at every turn by appeal to coherence. Both these chapters are very abstract, and the argument, with its manifold intricacies, is exceptionally hard to follow. Mr. de Selincourt's general theory has much in common with that of Plato in the *Republic*, as when he makes the pregnant suggestion (241) that "little more than a short incursion into metaphysics should be required in order to develop from our recent arguments the position that the source of all good is the harmony and system of the universe itself, and that particular things and states are good in virtue of their harmonious relations to one another and ultimately to it". The incursion would, we fear, be of necessity a lengthy one, and Mr. de Selincourt is well within his rights in refraining from it in this book. What he has succeeded in doing is so good that we trust he will see his way before long to satisfying these larger expectations. There is abundant evidence in what he has here given us of his competence to handle fundamental problems of metaphysics.

We have noted only two *errata*; on page 51, last line, for *respect* read *respects*, and on page 206, *note*, for *pages 12-12*, read *pages 121-2*. It would have been of real service to the reader if the author had prefixed to the volume a full analysis of the contents of the several chapters.

W. G. DE BURGH.

VI.—NEW BOOKS.

An Enquiry into Moral Notions. By JOHN LAIRD, F.B.A., LL.D., Regius Professor of Moral Philosophy in the University of Aberdeen. London: G. Allen & Unwin, 1935. Pp. 318, 10s. 6d.

If a reviewer finds a book difficult, apart from the complexity of its subject, the fault may be his own or the author's; and it is his business to give his readers an opportunity of judging which. But this, too, may not be easy; an accumulation of instances is the only method.

I think my own difficulty here arises from the author's habit, surely in Prof. Laird deliberate and capable of some justification, of using words and phrases with very unexpected meanings. What these meanings are can often be discovered from the context, but the suspicion is aroused that, where one is unable to understand a passage or to assent to an argument, the cause, though here undetected, may be the same.

For instance, a little reflection on the term 'Voluntary Obligations' in the title of chapter x led to the conclusion that it would deal with obligations which men would not stand under unless they had done something voluntary, such as making a promise. It is a surprise on reading further to find that it means obligations which we can carry out. It is this kind of language which leads to the singular question (p. 135) whether adultery is "a separate obligation", and to the phrases "the exercise of a motive" (p. 53), "conceivable, though perhaps more plausible than authentic" (p. 52), "men are doing something [*sc.* acting] when they are growing" (p. 113), "a particular species of voluntary action, *viz.*, moral obligation" (p. 119), "property is not a purely moral question" (p. 147), "the capacities of the agent are relevant to the amount of benefit he can bestow" (p. 154), "if a man who does good is not a *morally* better person than one who tries to do it and fails, we are inclined to say, so much the worse for morality" (p. 171), "a promise that is also a threat" (p. 177), "no reasonable person supposes that a promise wrongly made . . . should be kept" (p. 176), "so far as obligations depend on a beneficial purpose" (p. 195), "moralists may be concerned to a certain extent with welfare that may be a matter of luck" (p. 205), "the pursuit of ends, especially the *conscious* pursuit" (p. 207), "Whether or not axiological goodness may pertain to what is *not* axiologically good" (p. 217), "it does not follow that (our) satisfaction is wholly or principally mental" (p. 225), "some such truths, I suppose, really are evident" (p. 277), "the value of 'knowledge' would commonly be supposed to be a wide commendation of all man's cognitive functions" (p. 231), "no peculiar aesthetic emotion (although there are peculiarly aesthetic attitudes of soul that are fired by emotions in their own distinctive way)" (p. 235), "pleasure may be a harmony", "there is passion as well as vision in truth" (p. 240), "a vigilant body" (p. 241), "certain types of process can be satisfied in certain ways" (p. 59).

These are mainly examples whose meaning (whether we agree with it or not) may be more or less made out from the context. But the following

are a few examples of passages whose thought, probably from the same high-handed use of language, remains obscure: "Just as, in physiology there may be control by the autonomic as well as by the central nervous system, so, in moral matters, there may be at least two higher controls, only one of which is the control of volition. If so, we might control, nourish, or check our emotions; but not voluntarily. I cannot see, however, that such emotional control is less of an *action* than the voluntary control of our thoughts; and I do not see that it is less a matter of duty" (p. 131). "There is another sense of 'width' viz., extensiveness of logical range. . . . Must not the governing and more general obligation be also the greater?" (p. 196). (If I understand this, it asks the strange question whether the universal obligation to keep any promise must not, *when they conflict*, be greater than any particular instance of itself.) "A man's parents, his upbringing . . . may be, axiologically, very good. . . . Eugenically it may be better if his ancestors were tough than if they were either gentle or moral; but if his own worth has anything of potency in it, that is to say, has axiological as well as merely instrumental value, it need not be confined to his own short life" (p. 243). "Such an interpretation of virtue is more naturally allied with a wide axiology than with a narrow moralism; and if there be anything in virtue distinct from its intrinsic goodness (in the widest sense) and from its beneficial results, it is at least possible that the same wide standards should apply" (p. 77).

The book is divided into three parts: "I. Virtue; or the Theory of Aretics; II. Duty; or the Theory of Deontology; III. Benefit and Well-Being; which in the Form of Well-Doing may be called *Agathopoeics*." Its main purpose is to enquire whether any *one* of these three, virtue, duty or well-being, can be the foundation of ethics (p. 10). The relations between these three parts, however, are not quite symmetrical. For the third part is very closely related to the second, in that its main enquiry is whether well-being is the only thing or one of the things it may be a man's duty to try to produce. The first part, on the other hand, deals with "virtues that, in the main, are not matters of the 'will'" (p. 73). So far as they were matters of the will, or voluntary, their discussion would be related to Part II much as Part III is. But so far as (in the main) they are not, it is difficult to see how their discussion is connected with the other parts. Prof. Laird's contention that even if involuntary they might be obligatory hardly helps us. The difficulty arises from the uncertainty as to the meaning of the phrase "in the main". It cannot mean that some virtues are voluntary but that more are involuntary. Nor can it mean that, though it is in a man's power to take steps likely to improve his temper, it is very uncertain how far he will succeed; for that would be not less true about the production of well-being, of which indeed (in the author's sense of that word) it would be an instance. It seems as if it must be meant that the possession of a virtue is something so ambiguous that we can neither truly say there is anything, which a man can do, likely to bring it about, nor that there is nothing. And this interpretation is favoured by the phrases "in some degree voluntary", "semi-voluntary" and by the imputation to opponents of "a false glitter of apparent clarity".

The doctrine of Part III seems to be that all our obligations are obligations to try to bring about 'benefit', that is, some satisfaction of somebody (a 'final good' of his), but not necessarily always the greatest amount of such satisfaction, for there are other elements in 'well-being', besides 'benefit', which we also have obligations to try to bring about. Besides these personal satisfactions (or final goods) there are other 'axiological'

goods whose goodness does not consist in anybody's satisfaction. These are also instances of or elements in well-being, and we have obligations to try to produce them also. These *obligations* may conflict, and our *duty* then is to try to produce the greatest amount of axiological good.

The axiological goods, or well-beings other than benefit, are two. (1) Well-doing. An obligatory action, which is the attempt to produce benefit, may also itself have goodness, presumably if it is done because it is obligatory or from a desire to produce either benefit or some other axiological good. (2) Relational goods. These consist not in the satisfaction of A or B, but *e.g.*, in the relation between A and B, which may be a source of some satisfaction to both and must be to one, but whose goodness is not proportionate to the satisfaction (p. 181). I am not sure whether the goodness (1) of well-doing may not be in some instances reducible to (2) relational goodness. The goodness ascribed, *e.g.*, to the attempt to pay a debt or to keep a promise, when such goodness does not arise from any moral or virtuous motive, would have to be looked for in the relation, constituted by the attempt, between the two parties.

It is hard to be clear what Prof. Laird takes the relation between 'final goods' and 'axiological goods' to be. He denies that 'final goods' are always axiological goods, *i.e.*, that it is always good that anyone should have a satisfaction (p. 211), yet he asserts that "there is, in general, much axiological good in pleasure" (p. 237). Does he think that axiological goods are always final goods, both in the sense that we are satisfied in the contemplation of them and so desire that they should exist, and also in the sense that each of us especially desires to be able to contemplate them or to "enjoy" them as exemplified in himself? The answer to this question must be sought in such passages as: "knowledge is a great axiological good to its possessor" (p. 230); "one of the axiological values accessible to man" (p. 235); the passage above quoted from page 243; "goods that may be regarded as private possessions" (These goods must, I think, be axiological, for it is unexpectedly said in the context that a field with ten happy lambs is a *better place* than a field with one) (p. 247); "if a man has greater opportunities for achieving his own good than any one else's, that, I submit, is a moral reason for seeking his own good" (p. 272). The problem raised in the last quotation has been dismissed rather nonchalantly on page 146.

The quality of Prof. Laird's book is the vigour and vivacity with which he attacks important problems. But the problems, after all, are academic, or at least not practical. And, without implying that accuracy of expression is unimportant in the discussion of practical questions, it may be said that in purely philosophical discussions its absence is a defect for which hardly any quality can compensate.

E. F. CARRITT.

Logik der Forschung: Zur Erkenntnistheorie der modernen Naturwissenschaft. By K. POPPER. Vienna: J. Springer, 1935. Pp. vi and 248. M.13.50.

The purpose of this book is to supply a 'logical analysis' of the experimental method characteristic of the empirical sciences (p. 1); such topics as induction, probability, verification, the simplicity of scientific theories, the interpretation of probability in quantum mechanics, etc., are discussed in considerable detail.

Readers who are familiar with the work of the Logical Positivists (of whom the author, however, is by no means an uncritical follower) will expect to find a novel twist given to the 'problem of induction'. It is true that the author is not the first to find himself unable to defend induction against sceptical criticism while never seriously doubting the validity of physical principles. But for one who accepts the principle of verifiability, the familiar dilemma appears in the embarrassing form of a problem of meaning rather than justification. For if general statements can never be completely verified but, at most, supported by favourable instances, it is, for the consistent positivist, their very meaning which is in question. On the one hand, a strict interpretation of verifiability makes nonsense of science, while any laxity of interpretation (of an exceedingly vague principle) threatens to admit, not only general laws, but abhorred 'metaphysics'. The author, however, sees in the problems raised by Hume no more than a difficulty of *defining* science, accepting wholeheartedly the facile relativism which has robbed recent work of this school of some of its importance.

In his search for a definition of science as it is practised, Herr Popper has an ingenious method for reconciling general statements with the principle of verifiability. He maintains that such statements can at least be *falsified* (presumably by single unfavourable instances), and proposes to adopt this rather than the stricter demand of verifiability as a criterion of meaning: 'Ein empirisch-wissenschaftliches System muss an der Erfahrung scheitern können' (p. 13). The distinguishing characteristic of empirical, scientific statements is that observation may cause them to be abandoned.

The advantage of falsification as against the verification of general statements, it is urged, is that the former needs the observation of a finite, the latter, *per impossibile*, an infinite number of instances. Thus, while it is logically impossible that general statements (strictly, universal affirmative statements) should be verified, it is very frequently the case that they are disproved. And science is an austere pursuit of the unfavourable case, seeking satisfaction only in the rejection of its own provisional hypotheses.

Whatever plausibility such a paradoxical view might have is removed by the fact that, in practice, no scientific law is rejected on the basis of a finite number of contrary observations unless it is believed that the number of such observations could be indefinitely extended by any competent observer under similar conditions; strictly unique experiments, however discordant with theory, are neglected because their uniqueness guarantees their irrelevance: their importance is merely that of the inexplicable. Herr Popper, indeed, recognises that falsification, too, is a non-terminating process (*cf.*, *e.g.*, pp. 17, 19, 46, 48), but is unwilling to admit that this removes the chief reason for emphasising falsification rather than verification. His modification of the falsifiability criterion with the help of the notion of degrees of generality cannot be regarded as meeting this criticism. The fact is that by falsification he intends always a process employing *empirical* criteria; this it is, rather than the unnecessary emphasis on the negative aspect of observation, which gives strength to his rejection of 'metaphysics'.

Having adopted the programme of 'logical analysis', Herr Popper is committed to an examination of the relation between general and atomic statements (*Basissätze* in his terminology), and to a closer examination of the latter. Atomic statements are such as assert the occurrence of an observable event in a particular spacetime region ('behaupfen, dass

sich an einem individuellen Raum-Zeit-Gebiet ein beobachtbarer Vorgang abspielt' p. 60), but the vague term *observable* is regarded as a fundamental, undefined notion, rendered sufficiently precise by linguistic usage ('undefinierten, durch den Sprachgebrauch hinreichend präzisierten Grundbegriff' *ibid.*).

It will be noticed that atomic statements are expressed in materialistic terms (they are equivalent to statements concerning the spatio-temporal relations of physical bodies, p. 59), and indeed Herr Popper will have nothing to do with 'private' sense-data or their equivalent, the *Protokollsätze* of positivist theories with a solipsist basis (pp. 53-58). Nor will he accept atomic statements as final, in the sense of unchallengeable. Any atomic statement may in turn be challenged, and, eventually, perhaps, falsified. Where we choose to stop in this process is a matter of convention or convenience, our reasons for so doing an affair for psychology. 'The logical relationships [between statements] never compel us to halt at certain selected atomic statements, to choose precisely those statements or abandon the process of test [*Prüfung*]; every atomic statement can be further tested by deducing other atomic statements [with the aid of causal hypotheses]' (p. 60).

The infinite regress thus involved is considered unobjectionable because *deductive* in character (p. 61). All this is argued with much force but falls short of conviction; one feels that Herr Popper might have difficulty in answering an opposing case stated with more care than the actual object of his destructive criticism. (E.g. *must* a believer in sense-data assert that all knowledge is ultimately about his own experiences, as Popper seems to suggest on p. 52?)

Adequate criticism of Herr Popper's views on probability would call for inordinate detail. It may be sufficient to tell the intending reader that they are based on a general acceptance of the 'frequency theory' as advocated by R. von Mises in his book *Wahrscheinlichkeit, Statistik und Wahrheit* (1928), and that, while this theory is improved in some respects, even the extensive knowledge of the mathematical theory of probability which the method of treatment presupposes, is baulked by the author's irritating habit of promising to prove vital results at some other time. (Index number 2 on page 189, a crucial reference, floats unattached to any matter in the notes.) No author should provoke the reader into proving his results for him except as part of a settled policy.

But the latter part of the book, with its detailed reference to the questions involved in the applications of probability to physics, makes very interesting reading. The whole is an able contribution to a difficult subject.

M. BLACK.

Studies in the Platonic Epistles, with a Translation and Notes. By GLENN R. MORROW. Urbana, Ill., University of Illinois Press, 1935. Pp. 234. \$ 3.

PROF. MORROW'S book is a welcome contribution to Platonic Studies. It appears to be a thoroughly scholarly, competent, and judicious study of the nest of problems surrounding the thirteen epistles attributed to Plato. It discusses successively the Question of Authenticity, the Epistles and the Historians of Sicily, Epistle VII, The Theory of Knowledge in Epistle VII, Epistle VIII, Epistle III, Epistle XIII, Epistle II, Plato and Greek Politics,

Dion and the Reform of Sicily, The Experiment with Dionysius II, Dion's Triumph and Death, the Advice to Dion's Party in 353; and gives a Genealogical Table, and a Translation of the Epistles based on Burnet's text.

As a result of this intensive study Prof. Morrow arrives at a balanced judgment. He thinks that "most certainly not all these letters are spurious" (p. 12); but also that some are. Specifically, he rejects I, II, IX and XI, and is very doubtful about V and XII. He admits that there are sound reasons for questioning III, IV, VI, and XIII, though he does not reject them, while X is too short for any conclusion to be reached about it either way. So Plato's epistolary fame seems to rest with VII and VIII, which are of course the most important of all, and are shown to have entered largely into the historical tradition about events in Syracuse. No one can fail to be impressed by Prof. Morrow's defence of their authenticity.

And yet even this apologia will not set all doubts at rest. For on the *noscitur a sociis* principle they are not in good company. For in Prof. Morrow's judgment at least half of the Letters are spurious. Nor do they seem worthy of the Plato of the *Dialogues*. This is not in itself a conclusive objection; for a great writer is not bound to be a great letter-writer, and what is worthy of Plato depends all too much on the conception one has formed of Plato's psychology. I would myself freely admit that my own bias against the *Letters* springs in large part from the lowering effect their acceptance would have on my conception of Plato's personality, which is not counterbalanced by one's natural desire to get authentic first-hand evidence thereof from Plato himself. Admitting that such considerations are subjective (as all such judgments must be in the last resort), I should like to state a case against the *Letters* in spite of Prof. Morrow's skilful defence.

I will begin with Letter XIII, quite the most difficult of all to forge, owing to the multitude of detailed statements it contains, and quite the most revealing of Plato's personality. But also the most damaging. For it represents Plato as engaging in transactions of dubious honesty with Dionysius, which if they had become public would have justified his enemies in remarking: 'well it seems Plato did not do so badly out of his tyrant after all'. But how did it happen that such a letter became public property at all? It has no philosophic importance and was hardly important enough politically to be preserved either by Plato or by Dionysius: if it was at all contemporaneous, one is inclined to suspect a forgery with the purpose of discrediting Plato. The same difficulty of suggesting how it came to be preserved affects also Letter X.

Passing next to the disputable Letters, I am loth to admit the claims of No. III, because its beginning seems to me forced and trivial, and because 316A seems to convict Plato of a philosophic vanity to which one had hoped he might be superior: still, if others of the Letters are authentic, this may be too. No. IV seems to me to be damned by the rhetorical commonplace in 321A and the clumsy apology for it: No. VI by the ending, which seems to me pompous or grotesque rather than 'playful'.

We may now concentrate on VII and VIII, admitting that if VII is genuine, VIII may be also. Still VIII has some suspicious philosophic features. 354E seems to presuppose something very like the Aristotelian Mean, and the praise of experience also, in 355, seems Aristotelian rather than Platonic.

Epistle VII then is the last ditch for the defenders of the authenticity of the Platonic Letters to occupy. To me, however, it seems objectionable for the account it gives both of Plato's philosophy and of Plato the man.

It represents Plato as a megalomaniac rather than a man of the world, childishly jealous for the supremacy of his philosophic reputation and full of petty vanity. Surely the tale it tells (341 f.) about Dionysius's attempt to become a philosophic author is quite incredible. For it is highly improbable that if Dionysius had written a book, he would not have sent Plato an advance copy, and asked for his approval, or rather praise. The Dionysius of the epistle therefore seems psychologically impossible. And it is nearly as improbable that Plato would have staked the whole fortune of his scheme for the conversion of Dionysius upon a single lecture, and should never have attempted again to put his doctrine in a more persuasive light.

Philosophically the account of Epistle VII, though pretentious and obscure, is also unconvincing. Plato is made to say that he has written nothing about the nature of things nor ever will, for the reason that the subject is too difficult to be put on paper and can only be discussed *en petit comité* with intimate disciples. This would appear to be essentially the doctrine stated in a still more extreme way in (the spurious) Epistle II (p. 314), and would reduce Platonism to a sceptical sort of mysticism. But the commentators mostly choose to take it as a reference to the crux of the Idea of the Good, although this is not mentioned.

The alleged obscurity of the Platonic Good was, of course, a favourite subject of inventive criticism in antiquity, although no intelligent reader of the *Republic* should ever have misconstrued the teleological ideal upon which Plato bestowed this name, and though it is easy to see that it supplied the motive for all the mathematical developments of the latest Platonism, to which Aristotle bears authoritative witness. But all this has nothing to do with Epistle VII and 'the nature of things'. At the supposed time of the letter Plato must already have written the *Timæus*, or at least have intended to do so. And it seems to me fantastic to suppose that Plato, the greatest master and moulder of philosophic language the world has ever seen, would seriously have alleged any linguistic obstacle as sufficient to deter him from any investigation on which he had set his heart. The only way therefore of defending the Letters would seem to be to regard them as products of Plato's dotage; and this seems a far more repulsive hypothesis than that they are forgeries. However, they will no doubt continue to be subjects of academic debate.

F. C. S. SCHILLER.

Return to Philosophy. By C. E. M. JOAD. London: Faber & Faber Ltd., January, 1935. Pp. 279. 7s. 6d.

PROF. JOAD begins his journey by showing the present need for a philosophy and gives evidence from his own acquaintances. He points out how easy it is to satisfy that need with nonsensical doctrine, and attempts to define the proper qualifications of a philosopher. He proceeds to a "Defence of Value" (Chaps. ii., iii., iv.). Mr. Joad is convinced that the world does not know what things are good and true and beautiful; we have no standards, and sneer at those things which all civilised peoples have cherished (p. 91). He holds that we can *learn* to know value: contemplation and comparison will at last yield to a realisation—a mystical experience of which we can give no exact account (p. 109). He attacks certain writers (especially Mr. Aldous Huxley) who hold that value is subjective; they themselves (he urges)

do not believe this theory, for they preach their own standards as being valid for everyone (cap. iv.). Mr. Joad believes that synthetic propositions asserting that certain things have a certain value, are part of philosophy. These propositions are true in a straightforward and objective sense. They refer indirectly to our spiritual experiences: "We organise our sensory experience and produce the world of material objects which science explores; we organise our spiritual experience and behold, the dowagers Goodness, Truth and Beauty, whom philosophers discuss and whom mystics enjoy" (p. 136). These *objects* are just as real as physical objects (*ibid.*).

The next two chapters are a "Defence of Reason". For Reason has been attacked as a guide to truth and (secondly) as a guide to conduct. (i) Mr. Joad admits that some "sciences" (*e.g.*, politics and psychology) are full of prejudice and special pleading: but he maintains that in mathematics (and also in the physical sciences), reason does pursue truth without bias. Philosophy and religion cannot be controlled by experimental tests, and so are especially liable to subjective influences; but the author argues: "If I am right in supposing that the achievement of objective truth by the human mind is at least possible in other spheres, there is no reason why it should be impossible in those of philosophy and religion" (p. 172). (ii) Mr. Joad next considers the attack of Huxley, Lawrence, Hemingway, and others, upon the *reasonable* life. It has been claimed that Reason destroys happiness and makes neurotics. Joad shows that, whatever one's aims, they can be better achieved with the help of Reason. He goes further, and offers a defence of the "intellectual" who likes to plan his life and to moderate his desires (cap. vi.).

The last three chapters are a Defence of Philosophy and an account of the author's own philosophy. According to him, the mind can work on various "levels": sensuous intuition reveals physical objects; non-perceptual intuition yields us abstractions or objects of thought (p. 223). Amongst these are value-objects, and these may be directly intuited by a mind which has been properly prepared to receive them. Such preparation is to be found in the arts (especially music) and the sciences (especially mathematics). But the supreme propædæutic is philosophy; it is by reading and meditation that the mind is made ready for the mystical intuition by which it "breaks through" into the world of value objects (p. 265).

I cannot avoid the feeling that Mr. Joad confuses several different meanings of the word "truth". Truth in science (as he shows, p. 172), depends on experimental verification. Truth in philosophy, however, cannot be verified (*ibid.*); this is a great "embarrassment" (p. 30), but fortunately the *value* of philosophical literature seems to be quite independent of its objective truth or falsity (p. 255). Surely this suggests a different sense of "truth". Similarly, the author speaks of truth in mathematics (p. 163), but he realises that such "truths" tell us nothing about "the nature of the physical world" (p. 249). Is not this still a third sense of "truth"? Again, he maintains that propositions of ethics and aesthetics are objectively true; but he produces no convincing arguments to dispel the widely-held belief that "truth" in such subjects, is *not* "truth" in the sense proper to science. He may prove that Mr. Huxley is inconsistent, but he does not prove that his subjectivism is wrong. Mr. Joad finds it impossible to believe that statements of mere subjective feeling could be of any public interest. Surely the *interest* depends upon arousing the feelings of the hearer. I might express my feelings towards your picture

by slashing it with a razor, or by criticising it to your acquaintances ; in either case, your interest will be awakened.

It seems to me that upon the objectivity of ethical " truths " rest all the exciting and novel features of Mr. Joad's philosophy ; and this is a shaky foundation.

Is the author right in thinking that there is a great need for the study of philosophy ? This is itself a moral question, and opinions will differ. To some, philosophy is a poor sort of drug ; to others it is " *salus nostra, seu beatitudo, seu libertas* ". This book is persuasive, but leaves me in doubt. Will Plato and Peano ever be widely read ? Would anyone benefit by the rise of a philosophical journalism ?

The *Return to Philosophy* is not technical ; it is (I think) intended to have a wide appeal. Almost the only detailed references are to the author's own works.

KARL BRITTON.

The Illusion of Immortality. By CORLISS LAMONT. New York : Putnam's, 1935. Pp. xii + 294. \$3.00.

FOR many reasons this book ought to interest a wide public, including all kinds of philosophers, psychologists, and theologians. Its aim is so admirably stated in the Preface that I cannot do better than quote the author's own words : " . . . I have come to the conclusion that the life which human beings know on this earth is the only one they will ever have. I do not consider this conclusion a dogmatic one. All science is based ultimately on probabilities. And in this case the probabilities against the human personality surviving in any worth-while way the event called death seem to me so overwhelming that we are justified in regarding immortality as an illusion. . . . While there are plenty of works presenting the case for immortality—at least ninety-five per cent. of the literature in the field does this—there are very few, even in the literature of anti-religion, that concentrate on giving the case *against* it. Those who think that this life is all rarely take the time or trouble to say why. But the matter is important enough to warrant a careful statement. . . ." It is important that Mr. Lamont is not out to persuade and convert. His moderate tone is that of a man free from an unconscious religion rather than of a militant atheist.

Mr. Lamont arranges his material extremely well. He begins by stressing the importance of the problem : immortality is of more consequence to human beings than the existence of God, for God's value is derivative as a " guarantor " of immortality. Mr. Lamont brings to the surface in his striking way many such ideas which must have been dimly conceived without ever reaching direct expression.

He rejects all the Pickwickian senses, such as immortality by fame, in one's children, and so on, and concentrates on a " worth-while " immortality, with personal survival and memory (as urged for instance by Leibniz). His main positive argument against immortality he develops in chapters II. and III. He shows that, according to all conceptions, primitive, ancient, and modern, *the immortal soul must have a body*—either the same body as it had before death, or some spiritual, or etheric body. That it has the *same* body after life as it had in life is manifestly untrue. That it has a super-natural body is to invoke a dualistic psychology. Accordingly Mr. Lamont devotes care to the theme that in the light of biology, psychology, and medicine, only a monistic psychology is possible.

In other terminology we might say that any assertion about a man's mind must also be an assertion (or equivalent to an assertion) about that man's body.

The style of the book is such that these two chapters occupy ninety-one pages, while the argument, if put in an abstract logical way, could probably be written in one-tenth of the space. But not a word is superfluous. It is therefore easy to realise how great a wealth of concrete detail is brought to bear on the subject.

Mr. Lamont now tackles his problem on the negative side. He draws a vivid picture of the consequences that ensue if we suppose the immortal soul to have some kind of body. A body requires an environment; and he describes heaven-environments from Walhalla to the Eternal Brook of fishes—where exists "wetter water, slimier slime" and "never fly conceals a hook". On these conceptions he then makes some shrewd observations. Even the chapter on "The Failure of Arguments" is original. Most philosophers are agreed that none of the philosophic arguments for immortality has any validity, but Mr. Lamont handles the fruitless lore of the classroom most adroitly. The next chapter on "Motivations and Symbolism" is important. The author points out the excellent reasons we all have for desiring immortality. He goes on to interpret features of immortal life as *symbolic* of living ideals. It is a pity that Mr. Lamont does not here make use of the important contributions of the psychoanalysts; but perhaps these would have necessitated a much longer book or another volume, and carried him rather beyond his purpose. Finally in "Life without Immortality" the author presents himself undismayed by his findings and takes a quietly optimistic view of life. Appended are a very full bibliography, and some twenty pages of selected poems which exemplify features of the book. This is a highly original touch. It is also psychologically sound, for doubts that the ideas under discussion have actually been entertained can most easily be dispelled by turning to the poets.

Finally the reader would, no doubt, like to gain some idea of what Mr. Lamont succeeds in showing. He does not *prove* his thesis—but he does not try to. Nor does he use persuasion to convert "immortalists". The goal which he achieves may be explained by means of a distinction, made by Freud, between "illusion" and "delusion". The unconscious can manufacture illusions and produce the same effect as might be produced by a source external to the mind. We require additional evidence to decide whether an illusion corresponds with fact or is a delusion. To use this language, Mr. Lamont *proves* that immortality is an *illusion*; but he does not, any more than Freud, prove it a *delusion*. His sole aim is to render this highly probable.

J. O. WISDOM.

Das Ich und die Physik. By JULIUS SCHULTZ. Leipzig: Felix Meiner 1935. Pp. 80. M. 1.80.

This closely reasoned and pungently written little book is perhaps best taken as proof that the revolutionary developments of modern physics have not silenced and carried off their feet all the believers in Newtonian mechanism, and that a respectable case can still be made out for Euclidean space and old-fashioned matter. I regret that I am not competent to go into the scientific merits of Dr. Schultz's lively criticisms of modern physicists, but it seems legitimate to suggest that the fierceness of the quarrel between

the old and the new physicists might be considerably mitigated if both parties would consent to interpret their theories less dogmatically and more methodologically, *i.e.* not as concerning the ultimate nature of the physical world, but as involving questions as to how it is most convenient to operate on physical phenomena. In this respect at least the moderns would seem to have an advantage; for the very fact that so many of their conceptions are remote from sense-perception, paradoxical, and almost openly self-contradictory, seems to indicate that they are essentially instruments to operate upon what seem at present to be the empirical data. This difference comes out particularly in Dr. Schultz's treatment of Heisenberg's much-discussed principle of indeterminacy (p. 71). He rightly points out that it does not involve any hankering after metaphysical freedom. But neither does it warrant the inference that "determinism belongs to the incontrovertible essence of all worlds knowable by men" (p. 73). Dr. Schultz insists that, in science, 'chance' has meaning only within a strictly determined system, that statistical laws presuppose deterministic, and that from complete indetermination no probabilities or guidance of expectations could be deduced. But these considerations do not do more than make determinism a methodological principle, required for the purpose of calculating events; they do not tell the scientist what he is to do when experience confronts him with a course of events which defies his postulate. Now the logical value of Heisenberg's principle lies precisely in this, that it explains why the deterministic postulate cannot be used to determine simultaneously both the place and the velocity of electrons; it explains also why the fiction that the object observed is unaffected by the act of observation breaks down even in physics. Another point in which modern physics seems to be definitely superior to the old is in its treatment of the consequences of the second law of thermodynamics. For while the former is beginning to explain the possibilities of a beginning and an end to the cosmic process, the latter can only console itself with Dr. Schultz's suggestion (p. 31) that by postulating the world's infinity its 'entropy' can be prevented from growing. But does not this suggestion rest on the self-contradictory conception of an infinite whole? And what scientific evidence entitles him to assume that the real forms a whole at all? Is he not plainly yielding to the temptation of claiming real validity for what is essentially the old ontological argument for the existence of God?

F. C. S. SCHILLER.

Dictionary of Psychology. Ed. by H. C. WARREN. London: Allen & Unwin, 1935. Pp. x + 372. 15s.

This is an exceedingly useful book. It includes in the dictionary words belonging not only to psychology itself, but also current in the fields which border on psychology—neurology, physics, sociology, folk-lore, etc.

The subject matter of psychology is common property; both the professional psychologist and the man in the street want to talk about the same things. The result is that the language of the psychologist is often the same as the language of common-sense—with a difference peculiar to each user.

The position is inevitably made worse by the fact that the inter-relatedness of psychological data is such that the referents of symbols do not stand out with the obviousness that is found in such a science as physics. This means that a psychologist not only has to use a word tainted with the

vagueness of ordinary speech, but he may want to name one factor with a word which someone else has already used to denote two.

The business of a dictionary, therefore, is not only to give the meaning of words which are rare, and which have a fixed connotation, but it also has to indicate the various ways in which familiar words have been used by distinguished writers. This is what this dictionary attempts to do, and, in doing it, it will increase the intelligibility and accuracy of psychological works.

At the end of the book there are two glossaries, one French and the other German. These come after a useful appendix in which are given tables of the following material: Colour-vision tests, Complexes, Dextrality, Glands, Logical fallacies, Musical intervals, Phobias, Prefixes and Suffixes used in the formation of scientific terminology, Reflexes, Retinal layers, Sensory illusions, Spectral lines, Statistical formulæ, Technical abbreviations, Physiology and Anatomy.

It is not necessary to do more than give this list to indicate how useful the appendix is. Of course one could think of lists which might have been added; many people will say that the editor need not have included the logical fallacies; many people would like a list of recognised mental tests. But in a work of this kind one cannot hope to please everyone, and most of us will be thankful for what we have got.

W. J. H. SPROTT.

The Future Life, A New Interpretation of the Christian Doctrine. By FREDERICK A. M. SPENCER, D.D. London: Hamish Hamilton, 1935. Pp. 320.

Dr. Spencer's learned book should, I suppose, be regarded as, primarily, a contribution to theology rather than philosophy. But although he seems very much at home with the theological discussions of the future life, his book contains also chapters on *Greek Speculations* (Plato), *Psychic Communications* (spiritism and psychical research), *The Doctrine of Metempsychosis* (Buddhism, and Origen), *Evolutionary Immortality* (dealing with the Theosophists and some philosophers and theologians). Throughout he is preoccupied with the problem of making the social redemption of a race, which he takes to be implied in the doctrine of the resurrection of the body, accord with the immortality of individual souls. He inclines towards universalism and pre-existence, but grapples manfully with his many difficulties, and finally arrives at the conviction that "the Resurrection of Christ gives the solution of the problem of the future life" (p. 294), that "the Christian doctrine of the future life proceeds logically and inevitably from the Christian doctrine of the Incarnation" (p. 296), and that "God will be all in all, in such wise that we and everything that is valuable in our world will survive" (p. 316), in consequence of the postulate that God is love. All of which, if not very novel, is at any rate sufficiently orthodox. It seems a little unfortunate that Dr. Spencer should not have seen that the Platonic doctrine of immortality really threatens with eternal damnation (sooner or later) all the souls that fail to adopt (Platonic) philosophy before they have the misfortune to draw the first lot at reincarnation, and to damn themselves by choosing a big tyranny (*cf.* p. 164 and the Myth of Er), and that on page 91 the printer's devil should have turned 'Gog' into 'God'.

F. C. S. SCHILLER.

Received also :—

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VII.—PHILOSOPHICAL PERIODICALS.

JOURNAL OF PHILOSOPHY, xxxii. 15. **J. Ratner.** 'Scientific objects and empirical things' [refuses to accept Newton's account of scientific method as final. Hypothesis is no longer considered incompatible with experimentation; moreover "all experimentation and observation involve the use of empirical things and their secondary qualities"; and "it is the experienced 'appearance' that has the authority to make or unmake the 'scientific objects'; whereas the latter have no power to upset or even disturb the former." There is no reason why "scientific objects were (and are) supposed to challenge the reality of empirical things"; it is merely that the Greek theory of knowledge as contemplation was retained even though "it makes nonsense out of our science, the most extensive and most important body of *knowledge* that we possess".] **R. A. Schermerhorn.** 'Idealism, Essence and Existence' [concludes "how is the idealist justified in appealing to the doctrine of intelligibility in any unique sense?"] xxxii. 16. **P. Stanley.** 'The Scepticisms of David Hume' [defining scepticism as conscientiously suspending judgment concerning truth or falsity, the writer decides that Hume was six 'sorts of sceptic'. "Two of these are negligible. The remaining four split up into two incompatible pairs. One pair, the sceptics of the text-books and the commentators, the Cleanthes of the *Dialogues*, is probably the 'real' Hume, if by this is meant the *dominant* Hume. This Hume cannot to-day be called a sceptic at all. . . . The other pair of sceptics is the Pyrrhonist, the *recessive* Hume, rising at intervals to trouble the dominant Hume."] **P. S. Naidu.** 'Critical Realism and John Locke' [draws a number of parallels between them.] xxxii. 17 and 18. 'A Bibliography of Philosophy, 1934.' [It is perhaps worth noting that much the largest section, about 30 per cent. of the items catalogued, deal with the history of philosophy.] **H. A. Larrabee.** 'Pareto and the Philosophers'. [A review of Pareto's *Trattato di Sociologia Generale* translated under the title of *The Mind and Society* in four volumes and over 2000 pages by Arthur Livingston and Andrew Bongiorno.] **H. Miller.** 'Some Major Confusions of Contemporary Positivism' [criticises "the logical positivism of Vienna" as a self-contradiction. "As positivism, it denies the existence or validity of self-evident principles; but . . . as a logic it assumes the existence and validity of *a priori* principles." The logical positivist evades the problem of the relation of mathematical to physical theory "by his assumption of a complete, fixed, and absolute logic, even now in his possession." He misconceives "the nature and function of logical analysis". For "logic is not concerned with the reference to nature of the theoretical structures it studies or creates", whereas "science is a study of observable nature". So "what he offers to us as applied logic is an antiquated epistemology, presented as self-evident truth", and "the discriminatory and selective character of

scientific observation, the rôle of imagination in scientific hypothesis, and the crucial problem of the relation of verbal description to non-verbal experience are all ignored". In the end "logical positivism turns out to be nothing more nor less than a narrow predilection for mathematical physics"; and presently a "movement from the north will presumably wipe out this hardy little band of logical bigots along with any other last remnants of the Holy Roman Absolutism." xxxii., 20. **J. A. Goudge.** 'The Views of Charles Peirce on the Given in Experience'. [Severe criticism of vol. I of Peirce's *Collected Papers* as advocating "at least three mutually incompatible views concerning the given in experience".] **M. H. Moore.** 'Truth and the Interest Theory of Value.' ["Truth is a normative concept, the norm being distinct from interest. We are interested in truth. This is a true proposition about an interest we really have. But this interest does not create truth. The truth of a proposition is independent of our interest in its truth. Therefore, if value is defined as a function of interest, truth cannot be a value."]

PROCEEDINGS OF THE ARISTOTELIAN SOCIETY, 1934-35. N.S. Vol. xxxv.
G. C. Field. Presidential Address: 'The Examination of Assumptions.' [Discusses the view that the business of philosophy is the examination of assumptions.] **E. Conze.** 'Social Implications of Logical Thinking.' [An exaggerated, and in places crude, assertion of the dependence of logical thinking on social conditions.] **J. C. McKerrow.** 'An Attack on Aristotle.' [The title is wholly misleading. The paper expounds a behaviourist doctrine whose formula is that 'the nature of things is their habit': material systems, plants, animals, men, have each their characteristic modes of behaviour.] **C. E. M. Joad.** 'The Element of Greatness in Philosophy.' [Philosophy is an elevating pursuit because it is concerned with a world of (Platonic) forms and of values.] **T. Greenwood.** 'The Logic of Jules Lachelier.' [L.'s view of propositions, syllogism, and induction.] **R. L. Saw.** 'An Aspect of Causal Connection.' [The problem of the paper seems to be how a mere temporal succession of sense-perceptions is to be brought into relation with that causal connection between physical facts which is supposed to explain the succession. Whitehead's theory of events and objects is regarded as helping to solve the problem.] **E. M. Bartlett.** 'The Determination of the Aesthetic Minimum.' [Aesthetics should start, not with metaphysical inquiries into the nature of beauty, but with the analysis of the aesthetic judgment, and should consider primarily the subject rather than the predicate of the judgment. The first question will be to determine what sort of object evokes the aesthetic experience in its simplest form, *i.e.*, to determine the aesthetic minimum. This is some object of immediate intuition such that the contemplation of it is satisfying in itself. Emotion is not essential to the aesthetic experience.] **John Macmurray.** 'The Nature of Reason.' ['To say that a proposition is false is to say that it would be wrong to assert it. . . . The distinction between truth and error is, therefore, derivative from the distinction between rightness and wrongness. . . . Reason, in other words, is primarily practical.' But as we are later told that conscious activity is rational when it is determined by the nature of the object, the introduction of rightness and wrongness and the practical character of reason seems unnecessary and misleading.] **A. J. D. Porteous.** 'The Idea of Necessary Connection.' ['There are two types of connection in the universe, both intrinsic in character, which alike determine our thinking; the one type (the logical) makes possible *à priori* deduction, while the other (the causal)

is bound up with the nature of real existence, and makes possible *à post-eriori* reasoning.' **H. B. Acton.** 'The Correspondence Theory of Truth.' [The theory is stated as follows: 'when we believe—as contrasted with when we know—we apprehend a set of symbols, and our belief is true when the symbols (*a*) are used correctly, and (*b*) have the same structure as the relevant fact.' Objections and difficulties are considered. Some readers may feel that the primary difficulty is that the terms and assumptions used are not sufficiently explained. It is surprising, *e.g.*, to be told that 'truth can never be a property of knowledge, but only of beliefs.'] **The Earl of Listowel.** 'The Present State of Aesthetics in This Country.' [A survey of recent English aesthetics, pointing out directions in which our deficiencies might be supplemented by a study of continental work.] **C. Maund.** 'Hume's Treatment of Simples.' [H. fails to distinguish between the epistemologically and the psychologically simple.] **H. H. Price.** 'Some Considerations about Belief.' [Starts with the same sort of terminology and distinctions (Cook Wilson's) as in Acton's paper, and proceeds to an analysis of belief—various points in which seem questionable—and then discusses difficulties concerning (1) the nature of the evidence for what we believe, and (2) the distinction between belief and acceptance or taking for granted.] **Morris Ginsberg.** 'Causality in the Social Sciences.' [Enumerates the types of regularity which can be distinguished in sociological inquiry, and then considers how far they rest upon, or point to, causal connections.]

ARISTOTELIAN SOCIETY, SUPPLEMENTARY VOLUME XIV. 1935: SCIENCE, HISTORY AND THEOLOGY. **L. S. Stebbing.** Inaugural Address: 'Sounds, Shapes, and Words.' [A painstaking discussion about words, the spoken or written 'tokens' or instances of their use, the way in which meaning attaches to them, and so on. It is a kind of discussion which is perhaps hardly suitable for an inaugural address.] **C. A. Mace, G. F. Stout, A. C. Ewing, C. D. Broad.** Symposium: 'Mechanical and Teleological Causation.' [A more precise title would be 'Stout's View of Causation', and a sentence from his paper may serve to indicate the scope of the discussion: 'What for Hume barred the way to a rationalist view of causation was his failure to find a really relevant conception of active tendency'. There are here two main points: (1) the rationalist view of causation as against mere observed sequence, (2) the conception of active tendency as derived from our own experience of conation. As regards (1) there is general agreement, except that Broad has difficulties which he develops with an elaborate precision that may weary more than it enlightens the reader. As regards (2) there is much more difficulty: none of the other contributors is convinced by Stout's arguments.] **H. D. Oakeley, K. Cornforth, M. Ginsberg.** Symposium: 'Explanation in History.' [The contention of the first writer seems to be that history must be interpreted in terms of the spiritual progress achieved by persons in their struggle with alien or indifferent conditions. The second writer, after criticising the vague and negative character of the first paper, puts forward the Marxian doctrine that historical development is determined by the economic structure of society and the relations between social classes. The third writer argues (against the first) that scientific methods can be used in history, and (against the second) that historical materialism is much too one-sided.] **G. Ryle, A. J. Ayer.** Symposium: 'Internal Relations.'—[Neither writer makes use of any authoritative statement of the doctrine of Internal Relations by one of its supporters. They are

content to state what they themselves take the doctrine to mean, and then show that, so understood, the doctrine leads directly to consequences which anyone can see at once to be entirely false. On this the obvious comment would seem to be, that in that case the doctrine so understood can hardly have been what Bradley meant by it.] **J. L. Stocks, J. W. Harvey, J. Laird.** Symposium: 'Is a Science of Theology Possible?' [Stocks holds that 'a theology can only become scientific by becoming a philosophy', Harvey that 'the theologian can never achieve a science, for in adopting the scientific standpoint and attitude, he is applying the procedure of science in a sphere where it cannot succeed in its enterprise of gaining new knowledge', while Laird, though not denying the possibility of a science of theology, has evidently small expectations of the possibility being realised. None of the writers seems to have much (if any) acquaintance with the views of modern theologians themselves on the subject.]

PHILOSOPHY OF SCIENCE. II. 3 (July, 1935). **G. W. Morris,** *Philosophy of Science and Science of Philosophy*. [An important attempt to synthesise formalist, empirical, pragmatic and metaphysical conceptions of philosophy. "We begin then by rejecting any conception of philosophy as proceeding by methods other than those of science or as obtaining an order of certainty different from that obtained by science." But against Carnap's formalist conception of philosophy as the logic of science, i.e. as the mathematical analysis of the syntactical structure of actual or possible languages, it is urged that, in spite of the value of the results so obtained, on this view, "the work of the philosopher is hard to distinguish from that of the mathematician, and in any case does not result in really saying anything about anything." Of available alternatives to this "minimal definition of philosophy", the view, attributed to Wittgenstein, Waismann and Schlick, of philosophy as clarification of meaning, i.e. as a practical activity of examining disputed usages, resulting in the elimination of difficulties by a "return to the unproblematic", is held to be insufficiently explicit and to require the basis of a general theory of meaning (in the style of Peirce) in order to be effectively distinguished from the formalist conception. Besides these, there is an important place for philosophic analysis of the bearing of the scientific attitude and its results upon human culture (Dewey). This involves analysis of value-concepts and due attention to the "pragmatic dimension of meaning". Finally a case is argued for philosophy as empirical cosmology, i.e. as "an empirical equivalent to metaphysics in the form of a search for the generic features of all experience". "So conceived, the task of philosophy is to erect a conceptual scheme of such generality that it is confirmed by all data. It differs from science in the narrower sense only in generality, and not in method nor in the security of the results." An admirably lucid paper.] **C. Hartshorne,** *Metaphysics for Positivists*. [Suggests that metaphysics has been too lightly dismissed by positivists. In spite of "many failures to achieve meaning", the notions of metaphysics "have potential meaning in that some modification of them might render them significant conceptions". Metaphysics is "the study of ideas universally applicable", by the method of "imaginative sampling" (i.e. induction from a variety of imagined cases). "There is no possible untruth of the most general ideas (*sic*) but only the possibility of confusedly grasping their meaning", but on the other hand "the ultimate truths lack the discreteness of discursive thought" and "no metaphysical system will ever be the absolutely satisfactory and final one, but

will be more or less relative to the particular needs of the culture that produces it". "Metaphysical judgements are synthetic in the sense that it is always only probable that we have approximated to a correct understanding of necessary truth." On this basis is sketched a theory of "panpsychism" (or relativity of individuality) which is used in criticising Carnap's theory of a universal physicalist language. The author completely ignores the theory of the tautological character of the *a priori* which is an essential part of contemporary positivist doctrine.] **G. D. Birkhoff** and **D. C. Lewis, Jr.**, *Stability in Causal Systems*. [A clear definition of causal systems and somewhat less clear explanations of notions drawn chiefly from the mathematical calculus of variations are used for commenting on subjects ranging from quantum mechanics to the nature of personality and Nietzsche's theory of *Die ewige Wiederkunft*. A fine example of mathematical theme with obligato of quasi-physical speculation.] **W. M. Malisoff**, *An Examination of the Quantum Theories*. iv. [The last of a series of articles that has been appearing in this periodical. It is claimed *inter alia* that through examination of quantum mechanics, "New light has been cast on philosophic issues, suggesting (a) the futility of certain old philosophic muddles and yet (b) the value of cultivating paradoxes from the data of experiment; (c) a possible science of 'meta-physics' and thus (d) a basis for a truly unified science under the banner of physics."]

T. Dobzhansky, *A Critique of the Species Concept in Biology*. [A useful sketch of the problem of defining species in Biology. Lotzky's definition of a species as an habitually interbreeding community of individuals is considered in the light of analysis of isolating mechanisms found in practice, and is finally replaced by the modified statement: "A species is a group of individuals fully fertile *inter se*, but barred from interbreeding with other similar groups by its physiological properties (producing either incompatibility of parents, or sterility of the hybrids, or both)."] **E. C. Tolman**, *Psychology versus Immediate Experience*. [Adopting the familiar positivist conception of science as a map of immediate experience—"a set of rules and equations whereby we are aided in finding our way about from one moment of immediate experience to another", tries, on the basis of recent psychological experiment, to give a detailed account of the logical constructs appropriate to psychology. The facts of relativity of sense perception which led to the distinction between sense-data as immediately given (the subject matter of psychology) and the world of real material objects (the subject matter of physics) is claimed to be superseded by the distinction, in perception, between 'independents' and 'perspectives' (the author's neologisms). This is based on work by Brunswick, Katz and others on the so-called problem of 'Dingkonstanz'. "In any perception the organism 'intends' certain objective environmental characters" which can, in turn, be subdivided into two sub-classes: "(a) characters which are relatively independent and which may be said to inhere in the things or bodies themselves; and (b) characters which are dependent, and determined not only by the character of the thing in question but also by the special relations of the thing to the percipient." *E.g.* two men of equal (physical) heights at a distance of twenty and ten feet from the observer, respectively, will usually *appear* to be approximately the same height (independent characters given in perception) but can with considerable difficulty be made to appear in the ratio of two to one (perspective characters given in perception). Detailed reference is given to experiments for studying these distinctions behaviouristically, as with rats. "Both these types of intention are objectively discoverable and definable logical

constructs." The author proceeds to sketch plans for a 'molar behaviourism'. While 'molecular behaviourism' seeks physiological explanation of observed psychological data in neurological and glandular terms, the method of this paper is to find intervening variables in "specific types of behaviour readiness, or, in more common-sense terms, in objectively definable 'demands', 'intentions', 'expectations', and 'attainments'." "These behaviour readinesses are to be conceived as correlated with underlying molecular variables but having their own level of description." The theory is elaborated to the extent of further analysis of the 'behaviour-readinesses' into 'demands' and 'cognitions', the former being further subdivided into 'differentiations (or intentions as to qualities)' and 'hypotheses (or intentions as to relations)'. A clear and useful paper, with valuable reference to experimental researches by the author and others.]
Reviews and Notes. A New Budget of Paradoxes.

VIII.—NOTES.

W. R. SORLEY (1855-1935).

William Ritchie Sorley was a child of the manse. He was born in 1855 at Selkirk, where his father, the Rev. W. Sorley, was a well-known minister. He took a brilliant degree at Edinburgh in Philosophy and Mathematics. There the teacher who impressed him most was Prof. Fraser. He passed next to New College, Edinburgh, to study Theology, evidently with the intention of entering the Church. Among his fellow students at New College were three men who, like himself, did not become ministers but attained eminence in other lines—Seth, who was afterwards Professor of Moral Philosophy at Edinburgh, and Thomson and Kennedy, both afterwards Professors in Aberdeen University, the first of Natural History, the second of Law. There was also George Adam Smith, who did not, like the others, give up Theology, but became a very distinguished minister of the Free Church, an authority on Hebrew and a brilliant writer on Hebrew literature. G. A. Smith and Sorley were life-long and intimate friends. They went together in 1876 to study Theology at Tübingen. Sorley in 1889 married his friend's sister, Miss Janet Smith.

After winning the Shaw Fellowship, Sorley went to Trinity College, Cambridge. He took the Moral Sciences Tripos the year before W. E. Johnson and myself. In 1883 he was elected Fellow of Trinity. It was about this time that I first came to know him personally. Though I did not then see much of him, I was strongly impressed by his vigour and ability and by his friendliness. In 1888 he went to Cardiff as Professor of Logic and Philosophy and in 1894 to Aberdeen as Professor of Moral Philosophy. In 1900 he returned to Cambridge to succeed Sidgwick in the chair of Moral Philosophy. In 1913-15 he gave in Aberdeen the Gifford Lectures which are reproduced in his most important book, *Moral Values and the Idea of God*.

While he was Professor in Aberdeen, I was also there for two years as Anderson Lecturer. It was at this time that I became intimate with him, and learned to know his real worth as only his intimate friends could know it. I owe an immense debt both to Sorley and to Mrs. Sorley for their superabundant and unfailing kindness to me at this stage of my life. To them also I owe my introduction to a most interesting circle of friends whom they had gathered round them at Aberdeen. These included H. Grierson, the Professor of English Literature, W. Paterson, the very undogmatic Professor of Dogmatic Theology, and Harrower, the Professor of Greek. I have the happiest memories of this social group of which Sorley was the centre. I must add that it owed a great part of its charm to the lively wit and the cordial friendliness of Mrs. Sorley.

After I left Aberdeen, Sorley and I were separated by long distance and I met him only occasionally, though I seized the opportunity of my rare visits to Cambridge to see as much of him as I could. I always found him full of health and vigour and he remained so to the end when he was carried off by a sudden and brief attack of pneumonia at the age of 80. In accordance with his own wishes his body was cremated. The ashes were taken to Cambridge and buried in the west end of the Chapel of King's College, of which he was a professorial fellow. A very fully attended and impressive service was held in the chapel, concluding with eight lines from a poem by his highly gifted son, Charles Hamilton Sorley, whose premature death in the war was a terrible trial to his parents.

Sorley was a man of strong and warm feelings and, as I have already indicated, a most loyal and devoted friend. For the rest, what struck me most in his character was the consistent way in which he was guided both in his private and public life by moral standards and principles. Though he was in theory an "agathist," not an intuitionist, his prevailing tendency was to approach questions of practical conduct from the point of view of duties and rights as founded in the established social order, an order which was to be maintained in the absence of very sure and weighty reasons to the contrary. It seemed to me that he attached almost as much importance to insistence on rights as to the fulfilment of duties. In fact it was for him a duty to exact a right. Both were for him essentially correlated parts of the same moral order. He consistently followed his ethical principles in public as well as in private life. In politics, he may be fairly described as an enlightened conservative and an imperialist. But his imperialism did not arise from any desire of power or aggrandisement for its own sake. It was essentially founded on the conception of a nation as having moral responsibilities as binding as those of the individual. Here, too, duties implied rights.

Sorley's philosophical aptitude was not a one-sided gift. It was a special development of a general ability which might have gained for him a highly distinguished position in politics, in law or in business. Owing both to his natural bent and to his early education and environment, the central interest which attracted him to philosophy was its bearing on religion and the moral life. He was predominantly occupied with the place of moral values in the constitution of the universe. His primary thesis is that moral values are objective. This position he explains and defends with great thoroughness and acuteness in his Gifford lectures and in his early work on the *Ethics of Naturalism*. But if moral values are objective, another question arises which imperatively demands an answer. How is this sort of objectivity related to objectivity of fact? What is the ultimate connection of what ought to be and what is? If we consider finite moral agents, the answer is obvious. What is morally good is what we are morally bound to bring into existence so far as lies in our power. The limiting condition is important. We cannot be bound to pursue what does not lie within our power, and if we are not bound to pursue it, it cannot be a moral value. All that we are justified in saying is that it would have been so if it had been attainable. Even if what, considered by itself, is a good is also attainable, we are not morally bound to pursue it, if, in achieving it, we are as likely as not, or more likely than not, to set going trains of events in the indefinite future which will result in greater evil than the partial good which we have, for a time, brought into existence. But finite moral agents are only extremely limited and transient occurrences within the immensity of the universe. They are utterly unable by their power and

knowledge to determine the ultimate outcome of their actions. Hence, if, apart from ourselves, the universe in general is indifferent to moral good and evil, there is no reason for assuming that our best endeavours will not in the long run make things worse rather than better. This being so, we cannot be morally bound to pursue what are called moral values. But values that we are not morally bound to pursue are not moral values at all. The whole conception of moral good and evil as objective thus becomes illusory. It can, as Sorley argues, be saved only in one way. There must be in the universe a pervasive and controlling power which works towards good, the same good to which finite moral agents contribute each within his own limited sphere. This controlling power is identified by Sorley with the God of religion. He is by no means blind to the difficulties of this conception, but discusses them carefully and judiciously. The whole argument hinges on the objective nature of moral good and evil. It is pointless for those who do not admit this. But those who do so and yet reject Sorley's conclusion ought to show precisely wherein the fallacy of his reasoning consists. I cannot find that they have done so.

G. F. STOUT.

"BERNARD BOSANQUET AND HIS FRIENDS."

[By an unfortunate accident the letter which follows was omitted from the above-named volume. It is of so much intrinsic interest that I requested the Editor to allow it to be printed in *MIND*. It refers to the small too-little-known volume of translations and original verse published by Bosanquet and his wife under the title *Zoar* ("This city is near to flee unto and it is a little one", Gen. xix. 20) in 1919. The first paragraph relates to corrections of the text on pp. 30 and 34, on the latter of which there is a translation of "the Athenian's Confirmation Oath on his entrance into the citizen army at the age of eighteen". The reference in the second paragraph is to the "paraphrase" under the title of "Our Ignorance in Asking" of Goethe's "Denn die Wünsche verhüllen uns selbst das Gewünschte" (*Zoar*, p. 28):

"The gifts we longed and prayed for
The great gods send them down,
They send perhaps a martyrdom
When we desired a crown ;

But though our wishes painted them
In fraudulent disguise,
The gifts we longed and prayed for
Are here before our eyes."

to which Prof. Hoernlé seems to have referred in his letter of thanks for a copy of the book.

The last paragraph refers to Mrs. Bosanquet's poem on her husband, called "The Rock" in allusion to his family home at Rock in Northumberland :

"Like some great rock that stands securely based
 And checks the rushing torrent of the stream,
 Its footing on the solid earth, its crest
 Upreared to Heaven to catch the sunlight's gleam;
 Behind, a waste of shifting waters breaks
 Stormy and clamorous, broken and flecked with fear;
 In front, within the shelter that it makes,
 A wide still pool, serene and deeply clear:
 So stands the thinker, fixed on truth below
 And reaching high to catch fresh rays of light,
 Meeting the torrent in its noisy flow
 Of doubt, and broken thought, and jealous spite,
 While in his shelter peace and clear-eyed love
 Lie still and deep, and in their calm I move."

J. H. MUIRHEAD.]

THE HEATH COTTAGE,
 QUEEN'S DRIVE,
 OXSHOTT,
 SURREY.

Sept. 22, 1919.

MY DEAR HOERNLÉ

I am very glad you and your wife liked *Zoar*. Will you kindly correct two errata—one, the printer's, on p. 30, stanza 5 init. dl. the s in "quaffs"; the other, a slip of my memory, on p. 34, make sign of omission after "Athens' gods" and write on upper or lower margin

To ennoble and increase my country's sway,
 That sacred trust which I receive to-day.

About "our ignorance in asking" that is why I am replying at once, while I have your letter fresh in mind. Don't feel it puts you in debt for a further letter; I know people often dislike an answer by return for that reason.

It was written at the very worst point of the German offensive, when we thought it conceivable that the Channel ports might go, and we *might* have the enemy over here. I believe we were unduly alarmed; but of course one's information is very imperfect in those crises. Now considering our position—I needn't go into details, but one thing illustrates the whole—we *couldn't* have let our nice maidservants stay if the enemy had come; they as able-bodied women could easily have gone to their friends in a remote part of England and been well protected and fed there—Well then in our position it was really quite alarming, and we were prepared for anything. The lines came to me as expressing our feeling that we must do what we could in the situation, and of course we didn't doubt the country would survive and be stronger and wiser, whatever happened.

Then, as things turned out, and we got better information, it appeared that the second meaning or implication of the lines had justified itself, and that the great enemy offensive *was*, technically speaking, their final defeat. So that even in the vulgar sense, the idea turned out true, as I believe it constantly would and does. In that way, the two meanings run into one. If you judge with adequate ideas (Spinoza) there always is success for the good will, but sometimes of course it is very much disguised, or is not realised in your own person. I don't admit the difficulty you

say the people there find, *at all*. What *to do* is absolutely clear; it is to be equal to the situation, or to do your best, to make the most of it. I don't think desires or wishes, wh. take no shape in action, come into the moral question at all. They may do no harm if they don't interfere with action, but they are no good. But of course, surely, the faith that there is always a soul of goodness in things evil is just the essence of the will to find it out; either of these is strictly impossible without the other. Resignation in the sense of inaction while there is power to act is simply falsifying the situation isn't it? It is a lie, really; one is stating the situation as being what in fact it is not. There is a path, but you judge it too steep. Nothing but bona fides is wanted here. There is no question of theory concerned at all, I should say.

I want to say two things. I describe what we felt and meant. I have a strong opinion that in such discussions one should be allowed to do this and not be supposed to be attempting more. I mean, that we, or I, *should really* have acted worthily if driven to extremity I do not know nor say. All I know is what it was clear we ought to do.

And so about the Rock. I do hold my convictions very firmly, but any inference from that about character and conduct on the whole would be very precarious. I won't say more; affectation lies in wait for all such avowals. But it can do no harm to say what all my friends know that I am very easily upset by worry or insubordination, etc., etc. I should feel a humbug if I didn't say as much as this. Now you aren't bound to answer for a long long time.

Yours v. truly,
B. BOSANQUET.

AN AMBIGUITY IN THE TEXT OF KANT'S "FUNDAMENTAL PRINCIPLES OF THE METAPHYSIC OF MORALS".

TO THE EDITOR OF "MIND".

SIR,

There is a passage in the text of Kant's *Fundamental Principles of the Metaphysics of Morals* which, as it stands, does not make sense.

The passage will be found in Cassirer's edition of *Immanuel Kants Werke*, vol. 4, *Schriften von 1783-1788*, on p. 316. In T. K. Abbott's *Kant's Theory of Ethics* it appears on p. 76, or in the separate reprint of Abbott's translation of the *Fundamental Principles* on p. 91, at the very bottom of the page.

The sentence which I think has gone wrong is part of the final argument, under the heading, "On the Extreme Limits of All Practical Philosophy".

I begin by quoting the relevant context: "Philosophy must then assume that no real contradiction will be found between freedom and physical necessity of the same human actions, for it cannot give up the conception of nature any more than that of freedom. . . . It would, however, be impossible to escape this contradiction if the thinking subject, which seems to itself free, conceived itself *in the same sense* or *in the very same relation* when it calls itself free as when in respect of the same action it assumes itself to be subject to the law of nature."

And then follows the faulty sentence: "Hence it is an indispensable problem of speculative philosophy to show that its illusion respecting the contradiction rests on this, that we think of man in a different sense and relation when we call him free, and when we regard him as subject to the laws of nature as being part and parcel of nature".

I have quoted Abbott's translation, the italics being in the text. The German original, for comparison, runs: "Daher ist es eine unnachlassliche Aufgabe der speculativen Philosophie: wenigstens zu zeigen, dass ihre Tauschung wegen des Widerspruchs darin beruhe, dass wir den Menschen in einem anderen Sinne und Verhaeltnisse denken, wenn wir ihn frei nennen, als wenn wir ihn als Stueck der Natur dieser ihren Gesetzen unterworfen halten. . . ."

The translation is not too elegant. *E.g.*, the phrase, *unnachlassliche Aufgabe*, means an "inescapable task" rather than an "indispensable problem". But, on the essential point the translation is faithful enough. The sentence begins by laying upon philosophy the task of showing what the "illusion concerning the contradiction" rests on, *i.e.*, what it consists in, or what causes the illusion. It ends by stating the distinction which solves, or removes, the illusion. But an illusion cannot be caused by its own solution.

What Kant, I submit, meant to say is that the illusion of contradiction rests on *failure to distinguish* the sense in which an action can be regarded as free and the sense in which it is subject to the laws of Nature. What he actually says, as the text stands, is that the illusion rests on *this very distinction* between the two senses (or relations, contexts).

It is easy enough to understand how the slip occurred through Kant's thought, in writing, shifting from "it is the task of philosophy to show how the illusion occurs" to "it is its task to show how the illusion is solved". For, in either case, the kernel of the argument is the two senses, or contexts, in which man and his actions must be considered: distinguish them, as they ought to be distinguished, and there is no contradiction; fail to distinguish them, and you become the victim of the illusion that there is a contradiction.

I suggest that, in any future reprints of the translation, the slip should be pointed out in a footnote, even if, for the sake of literal faithfulness, the text itself is allowed to stand.

I may take this opportunity to correct what is probably a printer's error in another passage of Abbott's translation. On p. 20, middle, of the large edition, and p. 24, top, of the small edition, where Kant speaks of the Moral Law as a "compass" enabling men to distinguish, in every case, what is good, what bad, the text ought to read "conformable to duty" (*pflichtmaessig*), instead of "conformably to duty".

R. F. ALFRED HOERNLÉ.

"THE NEURAL BASIS OF THOUGHT."

A REJOINDER.

IN 1896 Prof. Pringle-Pattison published a critique of A. J. Balfour's *Foundations of Belief*, and Balfour writes him as follows: "You have done a real service, both to me and any of my readers who were fortunate

enough to see what you have written, by giving so admirable a summary of the general line of argument I have endeavoured to set forth. I had almost gone the length of saying that you are the only critic of any importance who has taken the trouble to find out what that line of argument is; the rest seem chiefly interested in discussing such fragmentary portions of the work as happen to be in collision with their own private views."

Mr. Sprott has adopted the latter of these different methods in reviewing *The Neural Basis of Thought*, and this method has the disadvantage of at once taking the book out of its historical perspective, as this is briefly indicated in the Prologue and also in the works mentioned in the Bibliography.

The problem dealt with is one of those which have been insistently surging up again and again as the inevitable sequel of the neurological studies of the last hundred years. These studies being cumulative and progressive have been gradually leading up to the question: What part do the delicate and intricate brain processes play in the delicate and intricate processes of Thought?

We are here up against such utterly diverse categories of thought that linguistic difficulties are inevitable and likely to be very great. We have to form a synthesis between two subjects which seem to have nothing in common.

To overcome these various difficulties there must be a certain attitude of mind characterised by some trace of urbanity when expressing views other than one's own. Mr. Campion "has no right to believe in the very existence of a thalamus outside his own, which has a dubious existence anyway because he has never seen it". Such a statement surely does little to advance the side of an argument on behalf of which it is uttered. It would be as legitimate for me to say: "Mr. Sprott has no right to believe in the 'apperceptive masses' of which he writes because he has never seen them; and anyway, Can he tell us what they are masses of? Are they masses of *Mind*?" There is little to choose between these diverse statements and questions. They may perhaps be held to equalise one another in absurdity. Nor are such methods likely to prove a useful preliminary for further intelligent discussion. Mr. Sprott however has been under the disadvantage that he has been unable to consult with those four Goddesses of Logic which have sprung so recently from Dr. Schiller's head as Athene did of old from the head of Zeus.¹ I do not wish to shirk the point raised by Mr. Sprott when he says, "Any view which makes thought an epiphenomenal correlate of physiological processes, is bound to lead to scepticism, and this is the danger that besets all physiologising of mental processes." In the introduction to his *Microcosmos* Lotze expresses his belief "how absolutely universal is the extent, and at the same time how completely subordinate the significance, of the mission which mechanism has to fulfil in the structure of the world". With this in mind scepticism of many things is natural and inevitable; scepticism perhaps even of the ultimate stability of Mr. Sprott's five initial presuppositions. During the

¹ Dr. Schiller's paper, "Multi-valued Logics—and others," where these Goddesses are introduced to Logical Society, was published in the same number of *MIND* as that containing Mr. Sprott's review so it was quite impossible for him to consult them. The names of the four were Barbara, Pythia, Polyanna and Cinderella; but for the settlement of the intricate problems now before us it may be necessary at times to enlist also the aid of Bradley's Goddess of Credulity.

last century we have grown sceptical of the fixity of species ; sceptical of the unchanging nature of the Platonic Universal ; of the indivisibility of the atom. During the past ages we have in turn become sceptical of the Ptolemaic and Newtonian theories of the Universe. These changes in thought in the past seem to indicate that we need not be frightened at the *word* ; and we may remind ourselves once more of the way Berkeley makes Philonous wind up his discussions with Hylas in a couple of sentences expressing the limitations of our faculties :—

“ You see, Hylas, the water of yonder fountain, how it is forced upward in a round column to a certain height, at which it breaks and falls back into the basin from which it rose ; its ascent as well as its descent proceeding from the same uniform law or principle of gravitation. Just so, the same principles which, at first view, lead to scepticism, pursued to a certain point, bring men back to common sense.”

GEO. G. CAMPION.

“*THE PHILOSOPHY OF JOHN DEWEY*” : A REPLY.

I am truly sorry that Mr. Feldman should be dissatisfied with my review of his book on *The Philosophy of John Dewey*, in *MIND* for last April (no. 174) ; but he leaves me completely at a loss about the grounds for his complaint. He accuses me of misquotation ; but I have verified all my quotations from him, and find they are accurate. As unfortunately he does not specify *where* he thinks he has been ‘misquoted’, I can give him no further satisfaction.

F. C. S. SCHILLER.

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